

POLICY AND PROGRAM DOCUMENT

1992 General Plan

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

APR 5 1995

UNIVERSITY OF CALIFORNIA



City of Cloverdale Volume I

August 1992

15 00 36
v.7

TABLE OF CONTENTS

I. INTRODUCTION.....1

Local Setting.....	1
Purpose and Nature of the General Plan.....	1
Preparation of the General Plan.....	5
Organization of the General Plan.....	6
Planning Perspectives in Cloverdale.....	7
Assumptions Guiding the Preparation of the 1992 General Plan.....	8
Planning Areas for the 1992 General Plan.....	9
Summary of General Plan Policy Statements.....	11

II. ELEMENT PLANS AND DIAGRAMS.....13

Proposed General Plan Land Use Designations.....	13
Proposed Circulation Plans and Diagrams.....	31
Adequate Housing Sites.....	31
Existing and Proposed Parklands Sites.....	38
Conservation/Open Space Element Map.....	38
Noise Contours.....	38

III. POLICIES AND PROGRAMS.....45

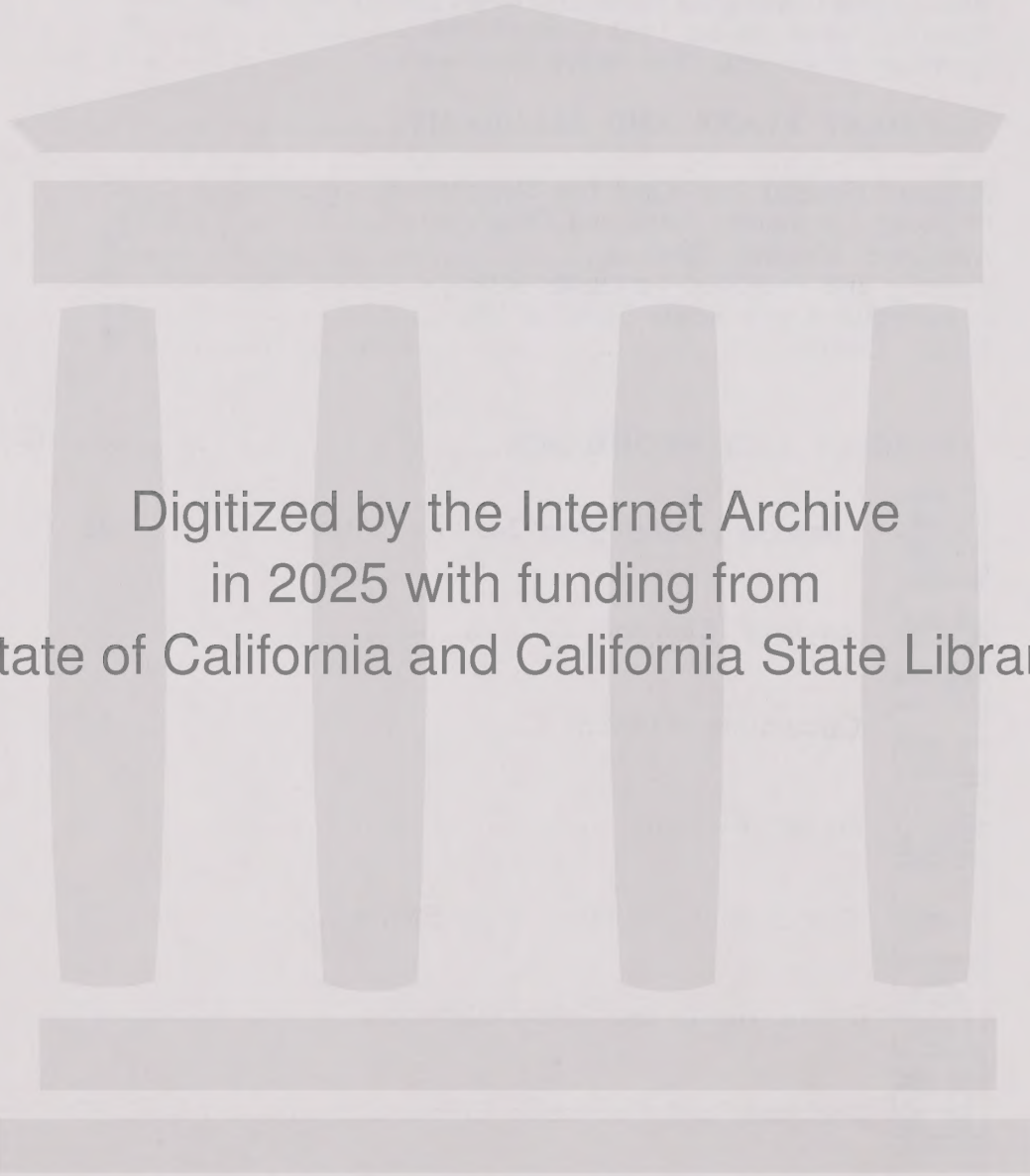


Community Development Land Use Element.....	45
Housing Element.....	55
Circulation Element.....	69
Noise Element.....	75
Conservation and Open Space Element.....	79
Public Health and Safety Element.....	87
Parklands and Recreation Element.....	97
Community Design Element.....	107

IV. REPORT PREPARATION RESOURCES.....117

V. APPENDICES

Appendix A--General Plan Responsibility Matrix
Appendix B--General Plan Requirement Checklist/Index
Appendix C--Units at Risk for Conversion
Appendix D--Noise Element



Digitized by the Internet Archive
in 2025 with funding from
State of California and California State Library

<https://archive.org/details/C124910212>

LIST OF EXHIBITS

EXHIBIT 1	Regional Location Map	2
EXHIBIT 2	General Plan Study Area	3
EXHIBIT 2A	General Plan Boundary Map.....	4
EXHIBIT 3	General Plan Land Use Plan	14
EXHIBIT 3	Key to Detailed Land Use Maps.....	15
EXHIBIT 3A	North Section Land Use Plan.....	16
EXHIBIT 3B	Downtown Land Use Plan	17
EXHIBIT 3C	Middle Interchange Land Use Plan.....	18
EXHIBIT 3D	South Interchange Land Use Plan.....	19
EXHIBIT 3E	Cloverdale Downtown Plan Map.....	30
EXHIBIT 4	General Plan Circulation Plan.....	33
EXHIBIT 5	Housing Sites Map.....	37
EXHIBIT 6	Existing and Proposed Parkland Sites	39
EXHIBIT 7	Conservation and Open Space	40
EXHIBIT 8	Existing CNEL Noise Contours.....	41
EXHIBIT 9	Future Noise Contours	42
EXHIBIT 10	Cloverdale Municipal Airport Referral Area Map.....	43

LIST OF TABLES

TABLE A	Density and Intensity Standards.....	20
TABLE B	Land Use Plan Buildout	21
TABLE BB	Population and Housing Units Projections by Planning Area	22
TABLE C	Highway Plan Concepts.....	34
TABLE D	Transit Plan Concepts.....	36
TABLE E	Housing Objectives	67
TABLE F	Parkland Definitions	98
TABLE G	Parkland Standards.....	100
TABLE H	Parkland Deficit Analysis.....	100

I. INTRODUCTION

The City of Cloverdale General Plan Policy and Program Document includes goals, policies, and implementation programs that constitute the formal policy of the City for land use, development, and environmental quality. This is a General Plan Update of the General Plan adopted in May 1978.

LOCAL SETTING

The City of Cloverdale is located in the extreme northern end of Sonoma County near the Mayacmas Mountains and Alexander Valley. The City lies in this valley formed by the Russian River. The junction of Highways 101 and 128 is located at the northern tip of the City. The City is located approximately 67 miles southeast of Mendocino, 34 miles northwest of Santa Rosa, and 25 miles south of Ukiah. Exhibit 1 provides an illustration of the City's location relative to other cities, highways, and geographical features, and Sonoma County boundaries. Exhibit 2 provides a description of the Study Area for the General Plan.

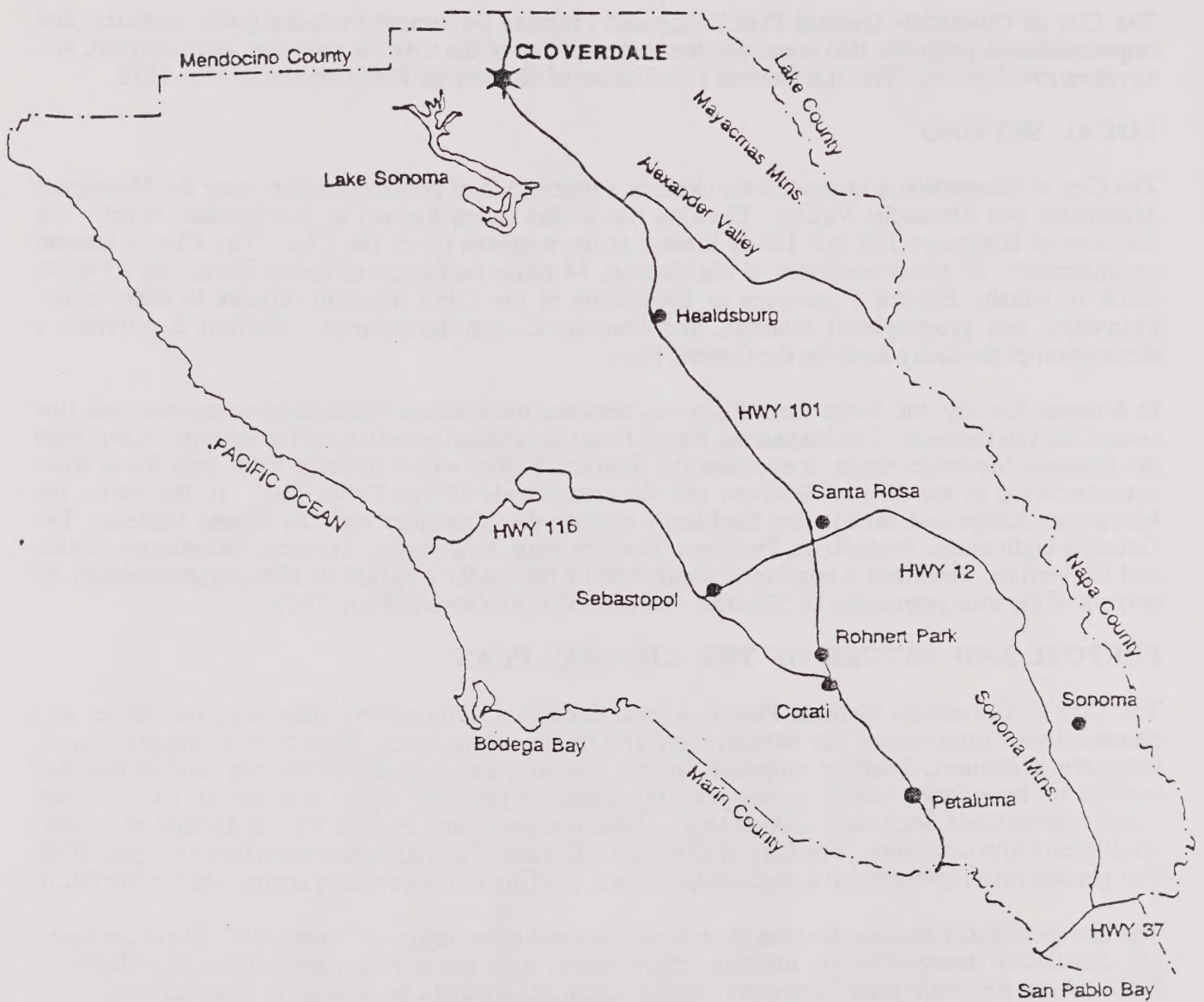
In Sonoma County, the Santa Rosa Plain lies between the Sonoma Mountains to the east and low coastal hills to the west. The Mayacmas Range forms the eastern boundary of the county. Along with the Sonoma Mountain range, it encloses the Sonoma Valley which extends from near Santa Rosa southeastward to the City of Sonoma and the marshlands of San Pablo Bay. In the north, the Mayacmas Range and Mendocino Highlands enclose the Alexander and Dry Creek Valleys. The County's eight cities, Santa Rosa, Petaluma, Rohnert Park, Healdsburg, Sonoma, Sebastopol, Cotati, and Cloverdale, contained a combined population of just under 200,000 in 1986, approximately 58 percent of the total population of 339,000. (Sonoma County General Plan, 1989).

PURPOSE AND NATURE OF THE GENERAL PLAN

The City of Cloverdale General Plan is a legal document, required by state law, and serves as a community's "constitution" for development and the use of its land. It must be a comprehensive, long-term document, detailing proposals for the "physical development of the city, and of any land outside its boundaries which in the planning agency's judgment bears relation to its planning" (Government Code Sections 65300 et seq.). Time horizons vary, but the typical general plan looks 10-20 years into the future. The City of Cloverdale General Plan has a time horizon to the year 2010. The general plan represents, at a given point in time, the City of Cloverdale's aspirations for the future.

The law specifically requires that the general plan address seven topics or "elements." These are land use, circulation (transportation), housing, conservation, open space, noise, and safety. In addition, Parkland and Recreation and Community Design Elements are included within the General Plan document. Once the County provides their required Source Reduction and Recycling Element, the City of Cloverdale anticipates incorporating it by reference.

The plan must analyze issues of importance to the community, set forth policies in text and diagrams for conservation and development, and outline specific programs for implementing these policies. Preparing the general plan can be viewed as an activity which sharpens and focuses the many concerns of citizens within the community. It also provides a structure by which these often conflicting concerns can be forged into a common vision of the future. By bringing attention to the issues facing Cloverdale and placing them in an expanded time frame, it helps citizens to see their community as a complex system--a living entity that grows and responds to problems and opportunities--and guides it along an agreed-upon course.

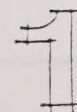


Source: STA Planning, Inc.

REGIONAL LOCATION

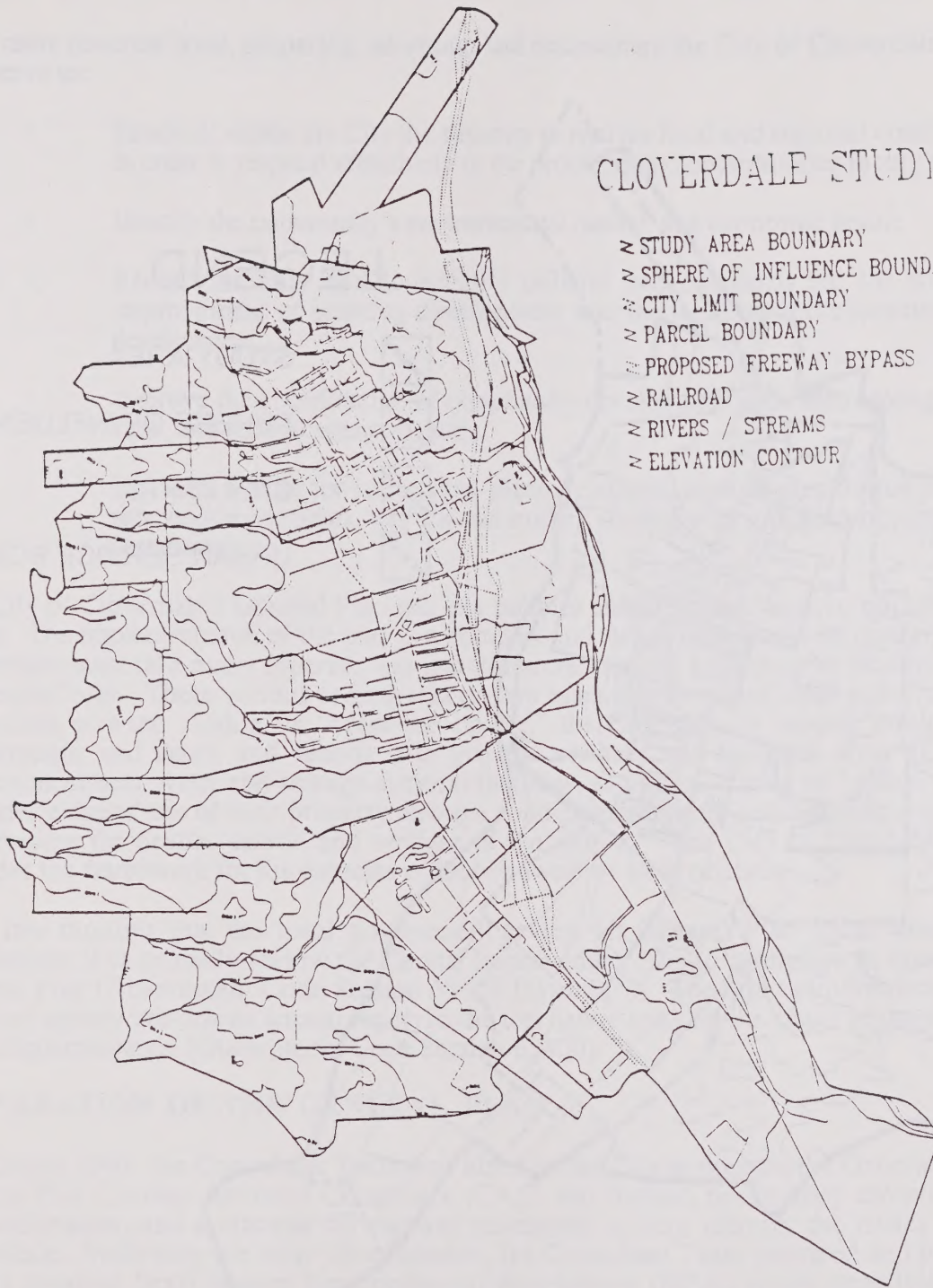
GENERAL PLAN

City of Cloverdale



no scale

CLOVERDALE STUDY AREA



Source: STA Planning, Inc.

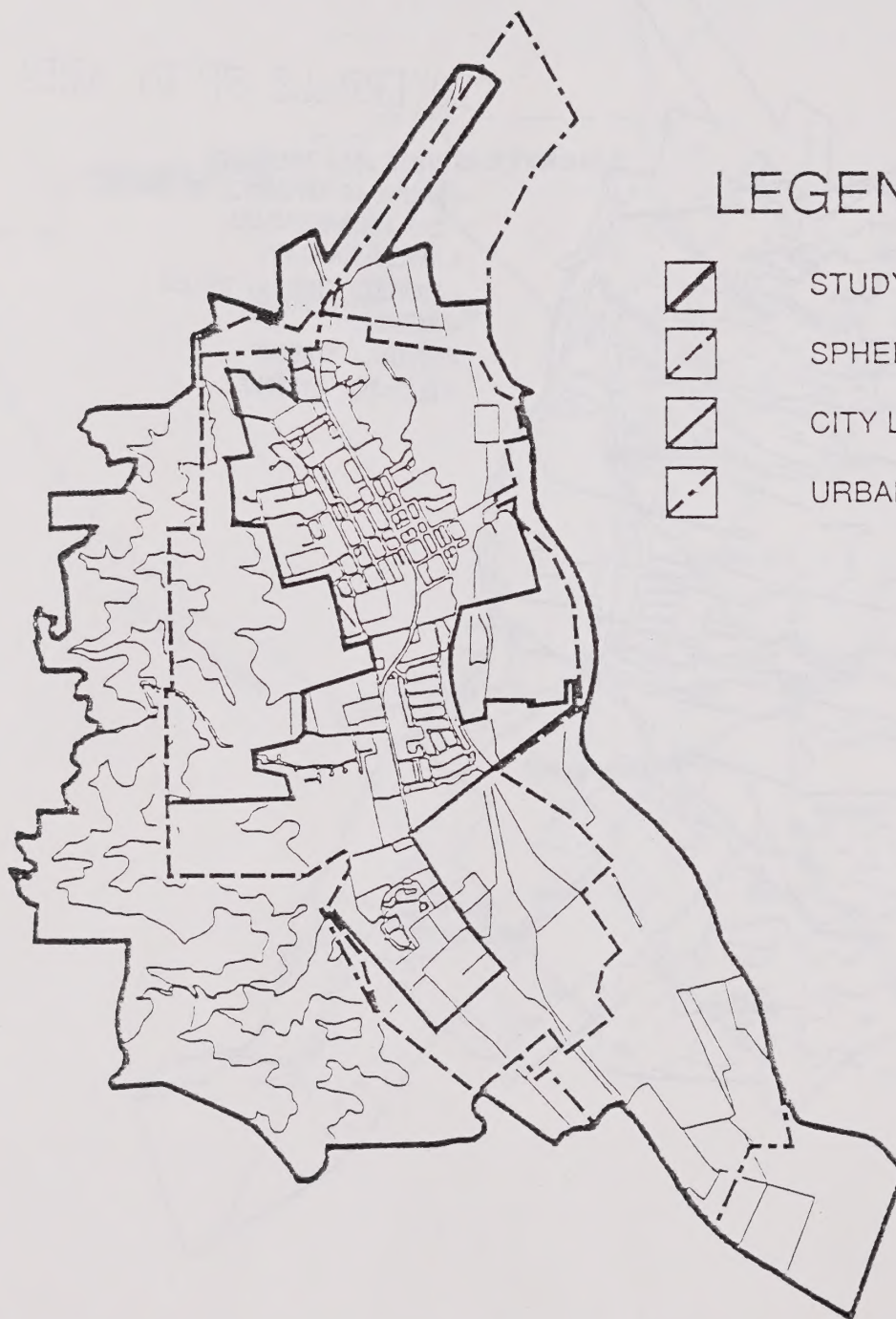
STUDY AREA

GENERAL PLAN

City of Cloverdale

2





LEGEND



STUDY AREA



SPHERE OF INFLUENCE



CITY LIMITS



URBAN SERVICE BOUNDARY

Source: STA Planning, Inc.

BOUNDARY LINES

GENERAL PLAN

City of Cloverdale

2A



no scale

On a more concrete level, preparing, adopting, and maintaining the City of Cloverdale's General Plan will serve to:

- Establish within the City the capacity to analyze local and regional conditions and needs in order to respond effectively to the problems and opportunities facing the community;
- Identify the community's environmental, social, and economic goals;
- Record the City of Cloverdale's policies and standards for the maintenance and improvement of existing development and the location and characteristics of future development;
- Improve the coordination of community development activities among local, regional, state, and federal agencies; and,
- Establish a basis for subsequent planning efforts, such as preparation of specific plans, redevelopment plans, and special studies, to deal with unique problems or areas in the community.

The City of Cloverdale's General Plan sets out policies and identifies ways to put these policies into action. The implementation of the plan is a complex and lengthy process in its own right. The City of Cloverdale must take many separate, but interconnected actions according to the directions set out in the general plan. These various actions rest on two essential powers of local government: corporate and police powers. Using its "corporate power," the City collects money through bonds, fees, assessments, and taxes, and spends it to provide services and facilities such as police and fire protection, streets, water and sewage disposal facilities, and parks. Using its "police power," the City regulates citizens' use of their property through zoning, subdivision, and building regulations in order "to promote the health, safety, and welfare of the public." The City of Cloverdale General Plan provides the framework for the exercise of these powers by local officials.

State law requires that the local government review its General Plan on an annual basis. One requirement is to annually review the Capital Improvement Plan to determine its compliance with the General Plan (Government Code Section 65103 (b) and (c)). The other requirement is that the local planning agency provide an annual report to the legislative body on the status of the plan and progress of its implementation (Government Code Section 65400).

PREPARATION OF THE GENERAL PLAN

In February 1990, the Consultant Team was hired by the City to prepare the General Plan Update. A General Plan Citizens Advisory Committee (CAC) was formed, preliminary environmental analysis was undertaken, and a citizens survey was conducted to help identify the issues and concerns of Cloverdale. Following the issue identification, the Consultant Team prepared and published in April 1991 a detailed Draft Master Environmental Assessment (MEA) report describing and assessing existing conditions, constraints, and in April 1991 an Alternative Plan Concepts Document was prepared to assist in the General Plan Update. This document will become a historical document and provides land use alternatives for consideration by the public, Advisory Committee, Planning Commission, and City Council.

Following its release, the MEA and Alternative Plan Concepts document was considered by the CAC in a set of workshops. Five alternatives of varying land use approaches to the City were presented to the CAC and discussed during their meetings from January to March 1991. On March 18th, the CAC selected a "Preferred Alternative" and the preparation of the General Plan Policy Document, Volume I, was then initiated. Further modifications were made to the Preferred Alternative by the CAC in response to concerns or comments by landowners, citizens, or interested parties. In October 1991, the

CAC forwarded to the Planning Commission the revised Preferred Alternative, a General Plan Policy Document, the MEA, a Draft Environmental Impact Report (EIR) and a recommendation for approval.

The City Council and Planning Commission collectively considered the findings of CAC and the Draft General Plan in two study sessions held on November 18th and December 2nd. Both the Council and Commission heard testimony during these sessions from the CAC, consultant, City Staff, landowners or interested parties on the merits or issues of the document.

Once the Planning Commission received the Draft General Plan in its entirety, they directed that the EIR be released for public review. The public review period for the EIR extend from October 28th to December 11, 1991, a period of 45 days. The EIR was circulated through the State Office of Planning and Research and distributed to all effected resource or trustee agencies.

The Commission evaluated the Draft General Plan in a series of 11 meetings held over a six month period from November 1991 to May 1992. One joint study session was held with the City Council on March 18th to discuss policies relating to hillside development and affordable housing. In reaction to additional public input, the Commission recommended for several changes to the document, mainly in the form of additions to clarify the language of the text. The Commission forwarded their suggestions to the City Council and recommendation for approval of the Draft General Plan on May 20, 1992.

The City Council received the recommendations of the Planning Commission on June 20th and held a series of public hearings extending into August. The Council considered land use changes, language modifications and directed the insertion of additional wording to the document. On September 23, 1992 the City Council adopted the Draft General Plan in its entirety.

Throughout the general plan revision the City made every effort to notify the public of opportunities to be involved in the process. Meetings were noticed in the local newspaper and at City Hall; the City made several direct mailings to Cloverdale property owners and organizations; and Cloverdale newspapers regularly carried topical articles on the progress of the general plan revision.

ORGANIZATION OF THE GENERAL PLAN

The Cloverdale General Plan consists of three major documents:

- General Plan MEA
- General Plan Policy and Program Document
- General Plan Environmental Impact Report

The General Plan MEA and Issues Report inventories and analyzes existing conditions and trends in Cloverdale. The MEA and Issues & Options (Volume II), which provides the formal supporting documentation for general plan policy, addresses nine subject areas: land use, economics, housing, transportation/circulation, public services and utilities, noise, public health and safety, conservation/open space, and recreation.

The Alternative Plan Concepts Document includes land use alternatives, an assessment for each alternative. The assessment evaluates such factors as population impact, number of households, job creation and impact on essential City services. From the proposed alternatives, a "Preferred Plan" was selected and incorporated into the General Plan Update Policy and Program document. The Preferred Plan will be analyzed in the Environmental Impact Report.

The General Plan Policy and Program Document (Volume I) includes the goals, policies, and implementation programs that constitute the formal policy of the City of Cloverdale for land use.

development, and environmental quality. It also includes plans and diagrams which provide a graphic depiction of community vision, goals, and policies.

The General Plan Environmental Impact Report (Volume III) will fulfill the requirements of the California Environmental Quality Act. This report analyzes environmental issues related to the adoption of the General Plan Update.

PLANNING PERSPECTIVES IN CLOVERDALE

The townsite of Cloverdale was originally part of the Mexican Rancho Rincon de Muscalon, a long narrow strip of land comprising 8,776 acres on both sides of the Russian River. The 1846 grantee of the Rancho, Francisco Berryessa, sold it in 1851 to Johnson Horrel, who in 1858, deeded 759 acres to Richard B. Markle and W.J. Miller. The two men established a trading post and tavern adjacent to the Russian River and the town of Cloverdale began.

Early settlers were predominantly farmers or ranchers who purchased properties for sheep, stock, vineyards or hops. J.A. Kleiser and David C. Brush purchased the 759 acres in 1859 and had the site surveyed, plotted and improved the main streets and erected a number of buildings. Commerce soon followed with various businesses being established. Issac E. Shaw arrived in 1872 and operated a hardware and grocery store and later a bank. The town developed in other ways, adding a post office, newspaper, school, social lodges and a few churches.

In 1872, Cloverdale was incorporated as a City and an official map of the City Limits (one of four on record) was drawn by Daniel F. Spurr. The railroad soon arrived, adding to the town's commercial, shipping and tourist viability. By 1878, the railroad service provided three trains a day between Cloverdale to San Francisco. In or about 1886, the citizens of Cloverdale organized a volunteer fire company. The first City building, a combined firehouse and City Hall, opened its doors in August 1887. The first street lights, fueled by coal gas, appeared in 1884. Telephone service began in 1883, water in 1884, electricity in 1897. The Citrus Fair was initiated in 1893.

The economy of Cloverdale in the early 1900's revolved around the agricultural, timber and railroad industries. The population always hovered around 1,000. The area was also known for its excellent wine production and warm climate. The 1900 census for Cloverdale shows eleven "grape growers" and eight "winemakers". However, the local wine industry suffered greatly during prohibition and several vineyards were turned to other uses.

The advent of mechanized equipment in both the timber and automobile industries further shaped Cloverdale. A number of logging mills were constructed in the area and served as major employers. With the availability of employment, the town experienced a boom in growth from 1940 to 1960 when the population rose from 800 to around 3,000. With the advent of the automobile and the slow improvement of Highway 101, Cloverdale become more of a highway oriented community. Businesses catering to the traveling public become common along Cloverdale Blvd. in the early 1960's. The first zoning map of Cloverdale was adopted in 1953, delineating the entire length of Cloverdale Blvd. as "Highway Commercial" and the rest of the community in two categories of residential districts.

The first General Plan for the City was adopted in 1978. At the time, the population was 3,770. The Plan set forth an ultimate urban boundary, redefined the City Sphere of Influence and proposed a maximum population of 17,800 by the year 2000. The 1978 Plan and the resulting zoning map deleted or converted a portion of the highway commercial area and added further definitions to the residential districts, including for the first time, hillside areas.

In the 1980's, the City annexed approximately 300 acres to the south, extending its City Limits to Santana Lane. Development plans for these properties were considered and approved by the City. A series of development applications for residential projects were submitted to the City in the late 1980's. Growth in

the residential housing market was occurring at a rapid pace along the Highway 101 corridor and Cloverdale began to experience this pressure.

In the early 1990's, the City received word from the State of California that the long awaited Highway 101 Bypass was funded and would be constructed by 1995. At the same time, industries in resource products fields such as timber manufacturing field and the Geysers began to lose force as the major employers in the Cloverdale area. In 1990, the City adopted a Downtown Specific Plan aimed at revitalizing the downtown business district and designating this area as the City's retail and cultural center. In light of the recent changes in the amount of growth, the effects of the Highway 101 Bypass and the evolving economy, the City authorized the preparation of a General Plan in late 1990.

ASSUMPTIONS GUIDING THE PREPARATION OF THE 1992 GENERAL PLAN

On the most abstract level, preparing the General Plan can be viewed as an activity which sharpens and focuses the many concerns of citizens within the community. The General Plan provides structure by which these often conflicting concerns can be forged into a common vision of the future. By bringing attention to the issues facing the community and placing them in an expanded time frame, it helps citizens see their community as a complex system--a living entity that grows and responds to problems and opportunities--and to guide it along an agreed upon course.

The preparation of the 1992 General Plan for the City of Cloverdale was prompted by other forces than regulatory mandates. The City faces an agenda of issues and opportunities unlike any other since its inception in 1872. In examining issues such as growth and change into the year 2010, the General Plan Advisory Committee, Planning Commission and City Council established a series of assumptions about the future environmental, social and economic influences upon this community. Within this document, the reader will find numerous references to these assumptions and their implications. These assumptions were used as a guiding force to shape the policies and programs of the 1992 General Plan.

The major assumptions considered by the City in their preparation of the 1992 General Plan included:

- Effect of Highway 101 Bypass on community. The construction of the Highway 101 Bypass during the planning period will greatly effect the social, economic, and environmental character of the City.
- Evolving economy and changing market conditions. The economy and employment trends for Sonoma County are changing from resource-based industries to trades and services industries. The City is becoming increasingly integrated into the Bay Area economy.
- Limitation of commercial and retail expansion in community. Given our size and population base, the City will experience only a certain level of growth in our commercial and retail uses.
- Residential growth pressure will continue to increase. The City will continue to experience growth pressure during the planning period as it extends north along the Highway 101 corridor.
- Protection of natural resources of area. The natural resources of the area such as the hillsides, creeks, and wildlife habitat lend character and definition to the City and are worthy of protection.
- Constrained public resources and facilities to service growth. The infrastructure and public service systems of the City are at or nearing capacity. To accommodate future growth, the City will need to undertake significant improvements to its public facilities.

- Balance residential growth with commercial and industrial base. To create a viable and economically healthy community, population growth should be balanced with the creation of retail amenities and a corresponding job market. Avoidance of a future "bedroom community" is highly desirable.

PLANNING AREAS FOR THE 1992 GENERAL PLAN

The planning area for the City's 1992 General Plan encompasses 7.2 square miles (4,608 acres) and extends generally east to the edge of the Russian River and west to the crest of the ridgeline and south to Dutcher Creek Road. Highways 101 and 128 are a part of the planning area as well as the City Municipal Airport. It includes two major creeks, Cloverdale Creek to the north and Porterfield Creek to the south.

There are four sub-areas within the area encompassed by the 1992 General Plan: the City Limits, Sphere of Influence, Urban Service Area and ultimate Study Area. (See Exhibit 2A) The policy guidance provided by this General Plan applies directly and immediately to all lands within existing City Limits; it applies to land within the City's Sphere of Influence only when annexation is being contemplated. Until such time, these lands are technically under the jurisdiction of the County General Plan. However, because lands within the Sphere of Influence are earmarked for eventual annexation, City policies have a strong influence over the type of development that occurs on these lands.

The four planning areas of the Cloverdale General Plan reflect a potential growth pattern for the community. The planning areas can be considered as concentric growth rings; the outer ring representing an area which will presumably be the last to develop. Given the City's public service constraints, it is reasonably foreseeable, and indeed encouraged, that the majority of development that occurs during the 20-year planning period will be targeted to the existing City Limits and Sphere of Influence.

In 1992, the population within City Limits approximates 5,300. The number of housing units approximate 2,295. Within the Cloverdale General Plan, the four planning areas have been examined for their future potential to incur residential growth beyond these current numbers. The "Preferred Plan" shown as Exhibit 3 reflects the "blueprint" or land use pattern being envisioned for the year 2010.

By examining the land use designations set forth in the Preferred Plan, the growth in population and housing within the planning area can be ascertained. The Preferred Plan proposes both minimum and maximum densities for all of its land use designations which can be equated into housing units and population. By the year 2010, the Plan envisions a minimum population of 10,781 and a maximum of 21,872 along with a minimum of 4,530 housing units to a maximum of 9,190. (See Table BB)

To achieve these population and housing estimates, the 1991 General Plan indicates that substantial upgrades must occur not only to prevailing City infrastructure and public service systems, but such growth must be balanced against the creation of an adequate employment base. To monitor the progress of future growth and to insure these goals are met, the General Plan proposes the establishment of a "Growth Management Plan". The Growth Management Plan will maintain population projections for five year horizons, on which to base planning and development decisions, including infrastructure and public service planning. In reality, the population and housing projections should only be used as guidelines and not as fact since the General Plan relies strongly on the Growth Management Plan to guide future development.

It can be reasonably assumed that buildout of the planning area, per the conclusions of the "Preferred Plan", will occur in a sequential fashion from the City Limits extending outward to the Study Area. A

description of the four planning areas, their particular geographic setting and a summary of their projected high and low population and housing estimates is provided below:

CITY LIMITS: Presently, the City Limits encompasses 2.3 square miles (1,536 acres). The City Limits can be defined as the core of the community, centered by Cloverdale Boulevard and including all residential areas, excepting for the Lile Lane and Church Lane vicinity. The area can be further described as that portion which is generally below the 400 foot contour on its western periphery and at the Russian River on its east. If future development were to be maintained solely within our existing City Limits, precluding any future annexation into the Sphere of Influence, the population estimates range from a low of 6,635 to a high of 13,849. The housing units within City Limits would range from a low of 2,788 to a high of 5,819. (See Table BB)

SPHERE OF INFLUENCE: The City Sphere of Influence encompasses 1.6 square miles (1,014) and has remained virtually unchanged since the City adopted this Sphere as a component of the 1978 General Plan. The current Sphere of Influence includes the industrial lands to the south to Kelly Road and Santana Lane, the western hillsides extending from the 400 foot to the 600 foot contour level and the AllCoast property to the east by the Russian River. If development were just to be evaluated in the 1.6 square mile area (not counting City Limits), the population estimates range from a low of 2,377 to a high of 5,017. The housing units envisioned within the Sphere of Influence would range from a low of 999 to a high of 2,108. Note: these numbers would need to be added to the projections proposed above for the City Limits to calculate full buildout of this area. (See Table BB)

URBAN SERVICE AREA: The City Urban Service Area encompasses 1.2 square miles (760 acres) and can be considered the "secondary" Sphere of Influence. The Urban Service Area for Cloverdale is defined within the County General Plan, which was recently adopted in 1989. The Urban Service Area extends beyond the Sphere of Influence and included the City Airport and other significant properties immediately south of the existing Sphere of Influence. If development were just to be evaluated in this 1.2 square mile area (not counting the other planning areas listed above), the population estimates range from a low of 1,589 to a high of 1,846. The housing units envisioned within the Urban Service Area would range from a low of 668 to a high of 776. Note: These numbers would need to be added to the projections proposed above for the City Limits and Sphere of Influence to calculate full buildout of this area. (See Table BB)

STUDY AREA: The City Study Area encompasses 2.0 square miles (1,260 acres) and can be considered the "ultimate" boundaries of the City. In setting the boundaries of the Study Area, the City included certain areas not for the purpose of examining their development potential for future annexation, but to provide a series of policies to the County to insure consistency in out land use regulations. Examples of this approach are the "Conservation Designation" applied to the Highway 128 corridor north of the City and the western ridgelines which indicate the City's preference to retain these features in their natural state. The Study Area extends beyond the Urban Service Area (excepting for the McCray Road area) and Sphere of Influence and includes the western ridgeline and significant properties to the southwest and east. If development were just to be evaluated in this 2.0 square mile area (not counting the other planning areas listed above), the population estimates range from a low of 178 to a high of 1,159. The housing units envisioned within the Study Area would range from a low of 75 to a high of 487. Note: These numbers would need to be added to the projections proposed above for the City Limits, Sphere of Influence, and Urban Service Area to calculate full buildout of the General Plan planning area. (See Table BB)

SUMMARY OF GENERAL PLAN POLICY STATEMENTS

Hundreds of policies and implementation actions are incorporated into this document. The policy statements carry forward the themes and reinforce the assumptions that are listed above. This section summarizes these major themes by outlining the land use changes resulting from the implementation of these programs.

The major policy statements of the 1992 General Plan are as follows:

- I. Recognize effects of Highway 101 Bypass by:
 - Minimize commercial uses along present Cloverdale Boulevard
 - Develop separate land use themes for two Highway 101 interchanges
 - Integrate programs of the "Downtown Specific Plan"
- II. Recognize effects of evolving economy in Sonoma County by:
 - Lessen dependence on resource industries as employment base and examine options to "Destination Commercial" development
 - Encourage the expansion and diversification of industrial uses to match growing population
 - Create a Capital Improvement Program (CIP) to identify public service levels and infrastructure needs for future industries
- III. Recognize growth pressure and allow for orderly development by:
 - Develop "Growth Management Plan" to pace future growth with availability of public services and facilities
 - Develop Capital Improvement Program to insure growth meets fiscal obligations in providing adequate public facilities
 - Balance residential growth with future commercial and industrial uses
- IV. Recognize natural resources of community by:
 - Enhance and protect major riparian corridors through or adjacent to the City
 - Maintain scenic ridgelines and hillsides
 - Develop future park areas in conjunction with natural features such as Russian River, Porterfield Creek, and western hillsides
 - Encourage the protection of mature, native trees and significant wildlife habitat

ELEMENT PLANS AND DIAGRAMS

INTRODUCTION

This section first presents General Plan Maps and Diagrams which designate and/or provide standards for the development of land uses, the circulation system, and housing within the City of Cloverdale. Next, elements of the General Plan are presented including Community Development Land Use, Housing, Circulation, Noise, Conservation and Open Space, Public Health and Safety, Parklands and Recreation, and Community Design.

The following definitions describe the nature of the statements of goals, policies, objectives, and implementation programs as they are used in this document.

Goal: The ultimate purpose of an effort stated in a way that is general in nature and immeasurable.

Policy - A specific statement in text or diagram guiding action and implying clear commitment.

Objective - A specific, often quantified guideline, incorporated in a policy or implementation program, defining the relationship between two or more variables. Objectives can often translate directly into regulatory controls. Objectives are often found in the Housing Element as quantified targets.

Implementation Program - An action, procedure, program, or technique that carries out general plan policy. Implementation programs also specify primary responsibility for carrying out the action and a time frame for its accomplishment.

Responsibility Chart - A chart which indicates the City departments responsible for the implementation of a policy or program. The Chart is included in Appendix A.

PROPOSED GENERAL PLAN LAND USE DESIGNATIONS

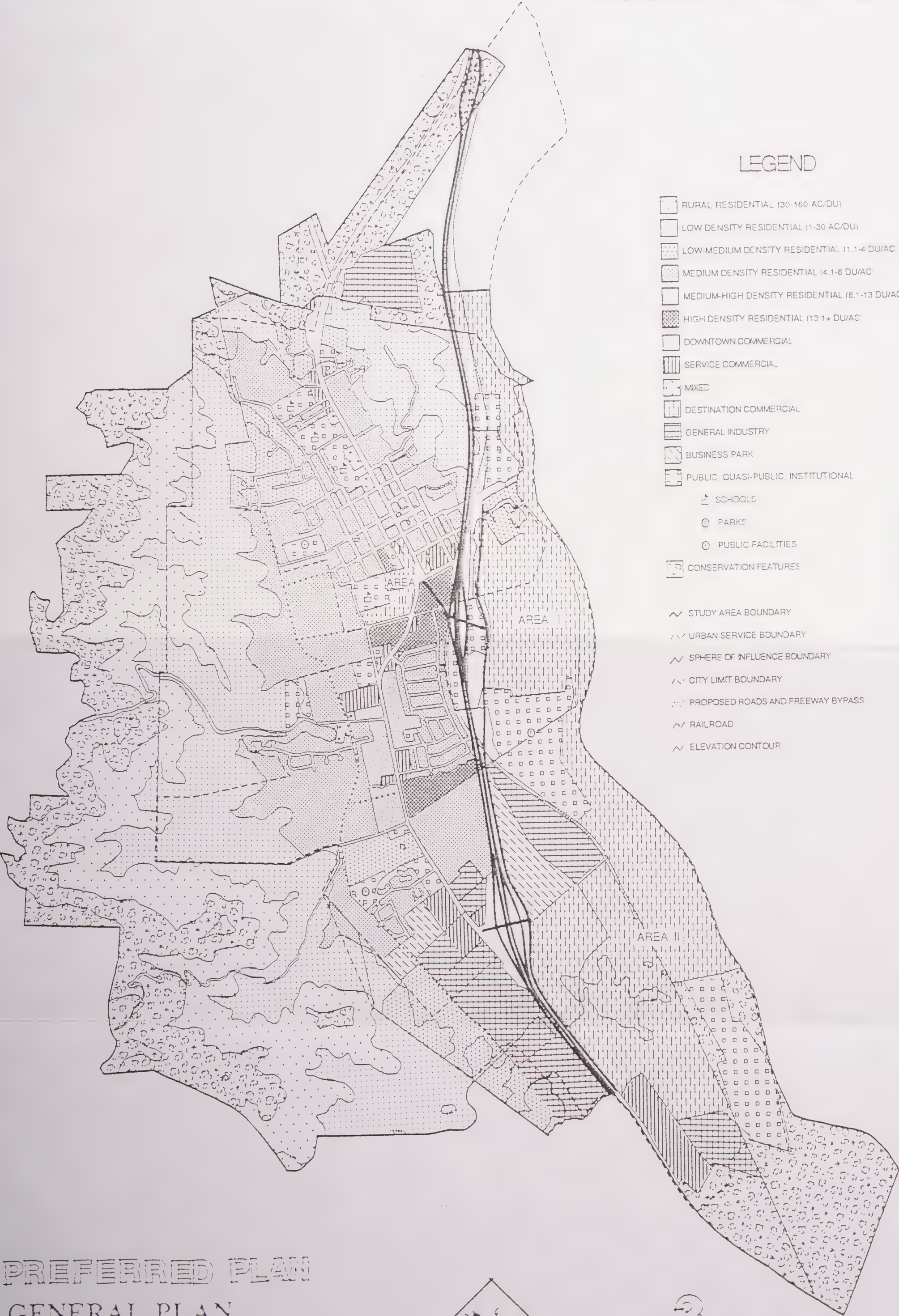
This section provides definitions and explanatory text for the designations as proposed on Exhibit 3, the Land Use Plan. The Land Use Plan portrays a desired land use pattern for the time when Cloverdale reaches buildout. The land use classifications described below cover both public and private development, and serve as a guide for zoning regulations and subdivision design. Table A presents a summary of density and intensity standards. Table B summarizes the buildout statistics for the Land Use Plan.

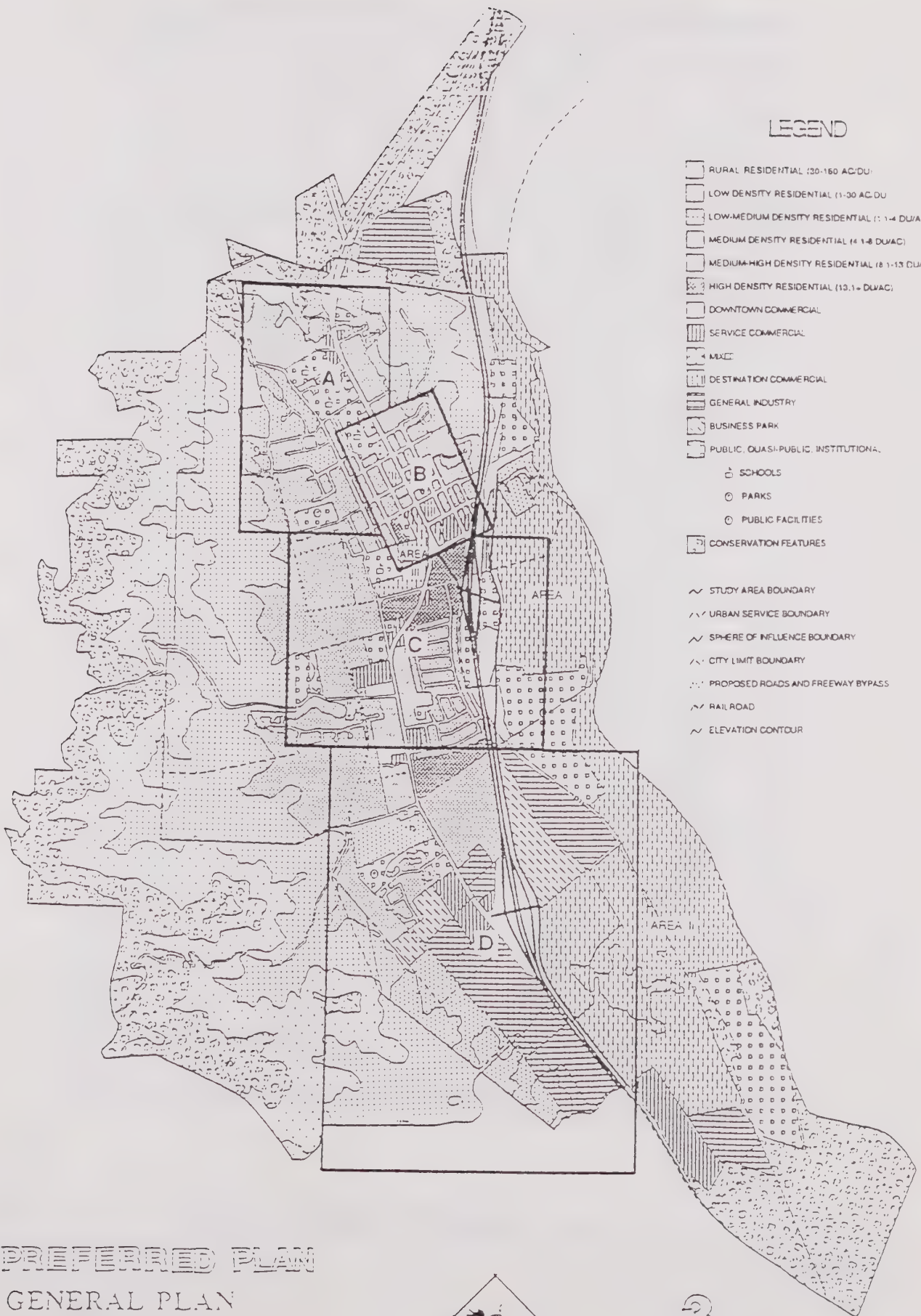
The Preferred Plan encourages the development of destination resorts and recreation facilities. It also encourages the re-focus of existing communities along Cloverdale Boulevard for residential uses. The plan allows for limited development in the higher elevations to be further defined in the future by a slope-density study. Some industrial and commercial areas are shown near the southern interchange. These are areas which should be subject to specific design criteria to produce an aesthetically pleasing entrance to Cloverdale.

CITY OF CLOVERDALE

1992 GENERAL PLAN

PREFERRED ALTERNATIVE





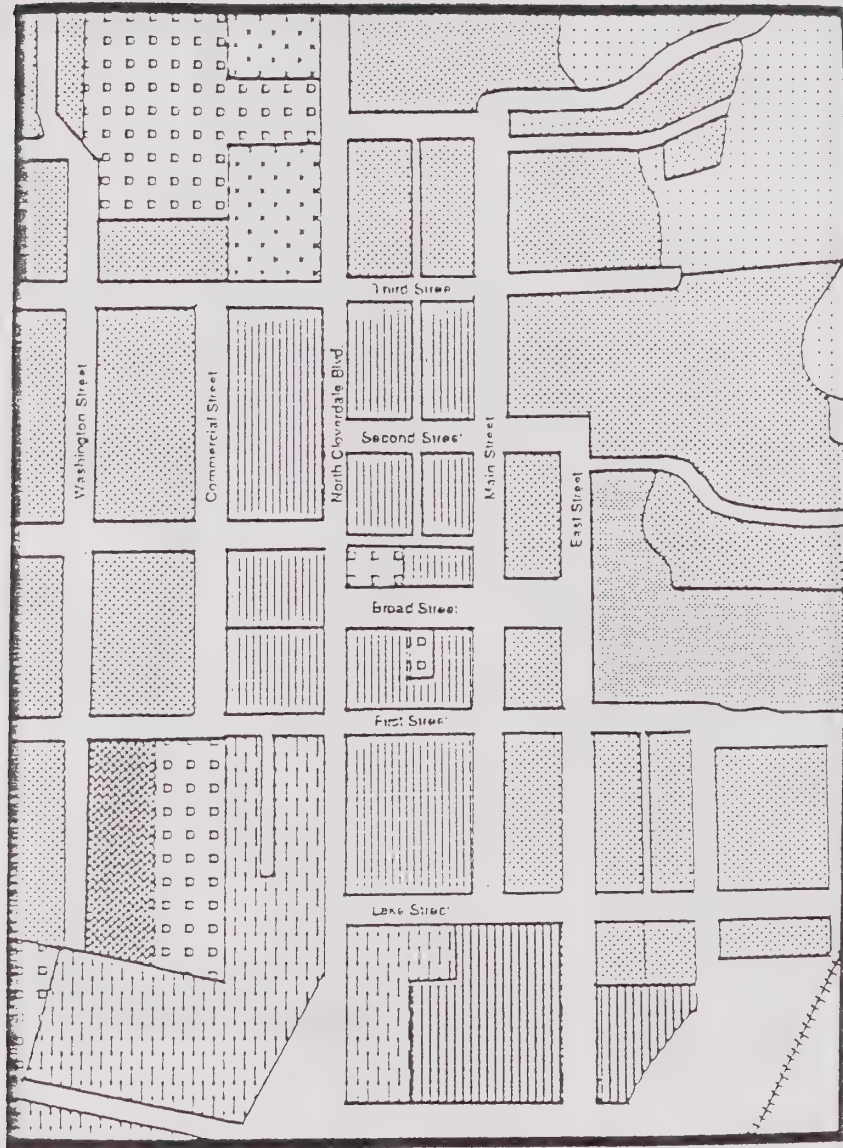
PREFERRED PLAN
GENERAL PLAN
 City of Cloverdale





NORTH SECTION LAND USE PLAN
GENERAL PLAN
City of Cloverdale

3A



DOWNTOWN LAND USE PLAN
GENERAL PLAN
City of Cloverdale



MIDDLE INTERCHANGE LAND USE PLAN
GENERAL PLAN
City of Cloverdale

30



SOUTH INTERCHANGE LAND USE PLAN
GENERAL PLAN
City of Cloverdale

3D

TABLE A
DENSITIES/INTENSITIES

CATEGORY	D.U./Acre	DENSITY	INTENSITY	
		Minimum Lot Size or Area Per Unit ¹	Population/ D.U.	FAR
<u>Residential</u>				
Rural	.00625 - .025	30 acres	2.38	
Low	.025 - 1.0	43,560 s.f.	2.38	
Low-Med	1.1 - 4.0	7,000 s.f.	2.38	
Medium ²	4.1 - 8.0	4,000 s.f.	2.38	
Med. - High	8.1 - 13.0	2,500 s.f.	2.38	
High	13.1 +	1,500 s.f.	2.38	
<u>Commercial</u>				
Mixed	4.1-8.0		2.38	.3 to .5
Downtown				.3 to .5
Service				.3
Destination				.5 to 1.0
<u>Industry</u>				
General				.35
Business Park				.35
<u>Public/Quasi-Public</u>				
				.35
<u>Conservation</u>	1 d.u. per 160 min.	160 acres		

Source: STA Planning, Inc.

D.U. = Dwelling Unit

FAR = Floor-To-Area Ratio

s.f. = square feet

¹Single-family detached uses a minimum lot size figure while single-family attached uses an area per unit figure.

²The maximum density allowed for properties with this designation west of Cloverdale Boulevard is 5 dwelling units per acre (5 d.u./acre); the minimum lot size for this area is 6,000 s.f.

TABLE B

LAND USE PLAN BUILDOUT

DESIGNATION	NO. GROSS ACRES ¹	% TOTAL ²	NO. HOUSING UNITS	COMMERCIAL SQUARE FT.
Residential				
Rural	507	11.6	13	
Low	806	18.5	806	
Low-Med.	215	4.9	861	
Med.	531	12.2	3,346	
Med.-High	49	1.1	644	
High	52	1.2	1,525	
Commercial				
Downtown	13 ³	0.3		277,000
Service	71	1.6		925,000
Destination	650	14.9	1,039	292,000
Mixed	8	0.2	64	128,000
Industrial				
General	245	5.6		3,731,000
Business Park	59	1.4		907,000
Public/Quasi-Public	258	5.9		
Conservation Features	895	20.5	6	
TOTALS	4,359	99.9	8,304	6,260,000

Source: STA Planning, Inc.

¹Total acres do not reflect total Study Area acres (4,674 acres) since areas such as roadways are non-classified.²Percentages are approximate and do not total 100.³The Preferred Plan designates the core blocks of the Downtown Specific Plan as Downtown Commercial. Surrounding blocks included in the Downtown Specific Plan generally reflect the overall uses identified in the Downtown Specific Plan. For instances at Third and Cloverdale Boulevard "Mixed" is indicated on the Preferred Plan. The Downtown Specific Plan indicates this area for Office and Residential. In other blocks, the Preferred Plan encourages more residential than the Downtown Specific Plan due the desire to strengthen the "viability" of the core blocks after completion of the Highway 101 bypass.

TABLE BB
POPULATION AND HOUSING PROJECTIONS BY PLANNING AREA

LOW POPULATION	CITY LIMITS		SPHERE OF INFLUENCE		URBAN SERVICE AREA	
	Housing Units	Population	Housing Units	Population	Housing Units	Population
Rural	0	0	1	2	0	0
Low	6	14	7	17	1	2
Low-Med	128	305	59	140	0	0
Med.	1452	3456	660	1571	21	50
Med.-High	389	926	0	0	0	0
High	657	1564	0	0	0	0
Destination	114	271	272	647	620	1476
SUB TOTAL	2746	6636	999	2377	642	1528

HIGH POPULATION	CITY LIMITS		SPHERE OF INFLUENCE		URBAN SERVICE AREA	
	Housing Units	Population	Housing Units	Population	Housing Units	Population
Rural	1	2	2	5	1	2
Low	239	569	278	662	9	21
Low-Med	504	1200	236	562	0	0
Med.	2904	6912	1320	3142	42	100
Med.-High	638	1518	0	0	0	0
High	1415	3368	0	0	0	0
Destination	114	271	272	647	620	1476
SUB TOTAL	5815	13840	2108	5018	672	1599

TABLE BB (Continued)
POPULATION AND HOUSING UNIT PROJECTIONS BY PLANNING AREA

LOW POPULATION	STUDY AREA		TOTAL OF PLANNING AREA	
	Housing Units	Population	Housing Units	Population
Rural	3	7	4	10
Low	7	17	21	50
Low-Med	27	64	214	509
Med.	17	40	2150	5117
Med.-High	0	0	389	926
High	0	0	657	1564
Destination	6	14	1021	2409
SUB TOTAL	60	142	4447	10585

HIGH POPULATION	STUDY AREA		TOTAL OF PLANNING AREA	
	Housing Units	Population	Housing Units	Population
Rural	11	26	15	36
Low	271	645	797	1897
Low-Med	108	257	848	2018
Med.	35	83	4301	10236
Med.-High	0	0	638	1518
High	0	0	1415	3368
Destination	6	14	1012	2409
SUB TOTAL	431	1025	9026	21482

RR Rural Residential

This designation is applied to areas of the City located on the outer fringes of the existing services but which have access to County or City maintained roads. It is applied to areas where steep slopes or hillside conditions exist, the fire hazard is high, or areas to be maintained in a rural character. Detailed environmental information must be submitted including topography, preliminary grading and drainage plans, roads and building plans, and tree and vegetation removal plans for any development proposed within this area. In many areas, development must adhere to strict design review guidelines to protect the viewshed. Because of the lack of City services and site constraints, development densities are limited.

The Rural Residential area is found in the western hillsides of Cloverdale, on properties ranging in elevation from 600 to 800 feet. The majority of the Rural Residential designated lands are outside the current City Sphere of Influence and the Urban Service Area. This area is predominantly undeveloped at this time.

This designation provides for single family detached units within a density range of 30-160 acres per dwelling unit as the primary use. Secondary uses include attached dwellings, farming, small-scale animal husbandry, home occupations, small scale home care and groups care facilities, public and private schools and churches, and other uses incidental to and compatible with the primary use. Clustering of units is encouraged in hillside and environmentally sensitive areas.

(LDR) Low Density Residential

This designation is applied to provide for single-family dwellings in areas with access to both water and sewer systems. As with the properties in the Rural Residential designation, the Low Density Residential area is sited on hillside lands, typically containing steep terrain, a high fire hazard and limited access. It provides a transition between hillside residential, rural residential areas, and higher density areas of Cloverdale. This designation provides for detached single family homes within a density range of 1-30 acres per dwelling unit as the primary use. Secondary uses include attached single-family, second units, manufactured/mobile homes, townhomes, condominiums and apartments. Clustering of units is encouraged in hillside and environmentally sensitive areas.

The Low Density Residential area is found in the western hillsides, the Clover Crest and Vista View neighborhoods of Cloverdale, on properties ranging in elevation from 300 to 600 feet. The majority of Rural Residential designated lands are within the current City Sphere of Influence and the Urban Service Area, excepting for an area within the southwest portion of the Study Area. The Vista View neighborhood is within City Limits and has incurred the most significant amount of residential development.

(LMD) Low-Medium Density Residential

This designation is to provide for single-family residential with access to both water and sewer systems. It provides for a transition between lower density residential and more and higher density residential while maintaining a relatively rural character. This designation provides for detached single family homes within a density range of 1.1 - 4.0 dwelling units per gross acre as the primary use. Secondary uses include attached single-family, second units, condominiums, apartments, and manufactured/mobile homes. Clustering is encouraged in hillside and environmentally sensitive areas.

The Low-Medium Residential designation has been applied to existing neighborhoods in the north portion of the City and to vacant properties adjacent to Cloverdale Boulevard in the south. The Hillside Drive, Kerry Lane, and north Foothill Drive, properties, most of which are improved with single family residences, are noted. Portions of properties fronting the extreme north end of Cloverdale Boulevard are also included for the purpose of further reducing the amount of commercial

uses along the main boulevard. The designation has also been applied to the area west of the industrial designated properties in the south of the City. The majority of these lands are within current City Limits, excepting for the area south of and adjacent to the industrial designated tract of land.

Medium Density Residential

This designation is applied to areas with both City water and sewer system. It provides for increased single-family densities and major subdivisions. Innovative design is encouraged to reduce the "tract" effect. This designation provides for detached or attached single family homes within the density range of 4.1-8.0 dwelling units per gross acre. The primary use shall include a variety of single-family attached and detached units including: single-family, manufactured/mobile homes, duplex, zero lot line detached, two-family detached, townhouses, duplex. Secondary uses include condominiums, apartments, and second units. For properties located west of Foothill Boulevard which propose the development of detached single family homes on individual lots, the minimum lot size for such projects shall be 6,000 square feet. For larger properties within this designation, the 6,000 square foot minimum may be applied on an overall density by "clustering" the units or reducing lot sizes in order to provide increased open space, parkland, or protect any natural or scenic resource.

The Medium Residential designation has been generally applied to areas below the 400 foot contour and within City Limits. The designation is found within existing neighborhoods in the core of the community, specifically, the area bordering Jefferson Street to the west and Main Street to the east. The designation is identical to the R-2 designation applied to this core area within the 1978 General Plan. It is the intent of the designation to support an increase in densities to those properties surrounding the downtown business district.

Medium-High Density Residential

This designation is applied to the core area of the City as well as other higher density neighborhoods. This designation provides for single family and multi-family units within the density range of 8.1-13.0 dwelling units per gross acre. Primary uses include innovative attached and detached single-family units including zero lot line detached, two-family detached, two houses, townhouses, duplexes. Secondary uses include manufactured/mobile homes, second units, condominiums, and apartments. A residential density bonus may be granted for developments that reserve units for low and/or moderate income households or include significant public recreational facilities or other public facilities which benefit the entire community.

The Medium High Residential designation has been generally applied to portions of land now zoned as commercial along Cloverdale Boulevard which are south of Tarman Drive and north of Hot Springs Road. A block of properties fronting First Street and immediately east of East Street have also been designated.

High Density Residential

This designation is applied to areas either in the downtown area or where large land holdings with full City services and good street access allow for higher density development. It provides for multi-family residential uses and for affordable housing opportunities. This designation provides a density range of 13.1+ dwelling units per gross acre. The maximum end of this density range is subject to final design, but is projected at 18 dwelling units. Allowable primary uses include multi-family units (triplex and higher), townhouses, condominiums, and residential care facilities. Secondary uses include detached single-family uses, second units, and mobile home parks/manufactured housing. A residential density bonus may be granted for developments that reserve units for low and/or moderate income households or include significant public recreational facilities or other public facilities which benefit the entire community.

The High Residential designation has been generally applied to properties within the central core of the community such as:

- An area east of Cloverdale Boulevard, north of Tarman Drive, south of Railroad Avenue and east to the Highway 101 Bypass.
- An area west of Cloverdale Boulevard, north of the existing Union 76 Station, south of South Street and west of Franklin Street.
- Brairwood Mobile Park.

Mixed

This designation promotes a combination of professional office and moderate-density housing along some selected areas of Cloverdale Boulevard. This designation provides a density range of 4.1-8.0 dwelling units per gross acre with the maximum allowable floor area ratio (FAR) for offices at 0.50. It serves to protect the larger victorian homes while allowing for a mixing of residential and commercial uses on these properties. This designation provides for the conversion of existing residences or encourages compatible design to allow professional and administrative offices, medical and dental clinics, studios, multi-family units, including apartments, townhouses and condominiums. A residential density bonus may be granted for developments that reserve units for low and/or moderate income households or include significant public recreational facilities or other public facilities which benefit the entire community.

The Mixed designation has been generally applied to approximately five acres of properties west of Cloverdale Boulevard and north of the downtown business district.

(D) Downtown Commercial

The purpose of the designation is to create a center for the City, a focal point that is accessible and provides neighborhood and tourist-oriented commercial uses. This designation generally encompasses the planning area of Cloverdale Downtown Specific Plan (generally Fourth Street to the north, East Street to the east, Lake Street to the south, and Washington Street to the west). See Exhibit 3A. Primary uses include banks, bed and breakfasts, churches, restaurants, retail stores, historic structures, medical uses, museums, mixed use (including office/ residential, and retail/office). The Specific Plan should be referred to for specific desired businesses. The densities of residential uses shall not exceed that of the High Density Residential designation with a maximum allowable floor area ratio (FAR) of between 0.30 to 0.50.

(CSC) Community Service Commercial

This designation promotes community-serving commercial uses with easy accessibility and convenience. It is applied near the Highway 101 by-pass and near residential neighborhoods where appropriate. Allowable uses include shopping centers, retail stores, automotive sales and service, lumber yards, nurseries, storage, equipment rental, repair services, wholesale businesses, limited professional/administration, motels/hotels, restaurant, food stores, liquor stores, dry cleaners, neighborhood-serving retail, video stores, shoe repair, and others determined appropriate by the City. Residential uses are strongly discouraged. Any future development within the CSC area should be compatible with the goals and policies of the Downtown Specific Plan. The maximum allowable floor area ration (FAR) is between 0.30 and 0.50.

The Community Service Commercial designation applied to the south interchange of the Highway 101 Bypass should feature uses catering principally to highway travelers and tourists such as hotels, motels, restaurants (fast food encouraged for this location), service stations, automobile repair

facilities, shopping center approved as part of the 1985 Ranch de Amigos development plan is recognized and given the CSC designation.

The CSC designated area adjacent to or immediately south of the downtown should offer services to the local community or driving public such as retail stores, professional offices, service stations, automobile repair facilities or sales, neighborhood serving retail, equipment rental or other similar and compatible uses.

Neighborhood-serving retail, food stores, liquor stores, dry cleaners, neighborhood-serving uses area particularly appropriate in the following locations:

- Cloverdale Boulevard at Champlain Avenue and north
- Cloverdale Boulevard at Alter Street
- Cloverdale Boulevard at Brookside Drive and Hillside Drive
- Railroad Avenue at East Street

Destination Commercial

The Destination Commercial designation applies to three areas; one within City Limits and adjacent to the downtown core and the other two areas being south and east of the City and along the Russian River. The designation is intended to encourage the creation of recreation and tourist-commercial uses to serve as a distinctive entry into the City. The mixing of residential uses and recreational amenities within these properties is encouraged. The designation was applied to vacant or underutilized properties which were viewed as being subject to change upon the construction of the Highway 101 Bypass. Areas II and III require the preparation of Specific Plans, given the need for an adequate circulation and utility plan for these parcels.

This designation provides for a residential density of 4.1-8.0 dwellings per gross acre as applied to a maximum of 20% of the buildable area contained within the project boundaries. The maximum allowable floor area ratio (FAR) is 0.5 to 1.0, with the higher range only being applied as a measure of the amount of amenities of the project.

The types of uses encouraged within Areas I-III vary according to location and are noted below. Primary uses include golf courses, hotels, motels, recreation vehicle campgrounds, bed and breakfasts, parklands, destination resorts, and retail uses, if similar and compatible. Secondary uses include residential developments (if associated with a recreational amenity or visitor serving facility), convenience stores, community centers, service stations and art, craft or music schools.

Area I-III are delineated on the Preferred Alternative shown as Exhibit 3. The three areas found within the Destination Commercial designation are described below in further detail:

Area I: Area I consists of approximately 234 acres located in the northeast portion of the City. The majority of the land is within City limits. Significant properties include the Wright Park, Log Pond Enterprises, Inc., All Coast Forest Products, Inc., Sciaini, and Matovich. The primary uses encouraged within Area I are public parks (Wright Park), residential with mixing of recreational amenities, applied and performing arts schools and studios, convention centers, hotels, and public recreation or activity centers.

A thirteen acre area within Area I that is generally bounded by First Street, Live Oak Lane, Lake Street and the Russian River and shown on Exhibit 3 shall be primarily targeted as residential in such use and densities as previously described in the 1978 General Plan. The western boundary

between the residential or R-1 designation and Destination Commercial shall also be consistent with the 1978 General Plan by conforming to the toe of slope or approximately the 320' contour of the hill. All Destination Commercial uses proposed adjacent to, or adjoining the boundaries of this residential neighborhood shall be compatible with the existing land use and evaluated on their ability to avoid any nuisance features by adhering to all noise, traffic, lighting or other performance standards expressed in this General Plan.

Area II: Area II consists of approximately 409 acres located in the southeast portion of the City. Area II is outside City limits, but within the Urban Service Area. Significant properties include Louisiana Pacific Corp. and Sonoma-Lodi Joint Venture. The primary uses encouraged within Area II are golf course or commercial recreation facilities, hotel, motel, convention center, recreational vehicle parks or campgrounds, and residential uses in conjunction with recreational amenities.

Area III: Area III consists of approximately 21 acres located in the center of Cloverdale, within the downtown business district. Area III is within the City limits and, in contrast to Area I and II, does not require the preparation of a Specific Plan. Significant properties include the Citrus Fair and Seghesio Vineyards. The uses envisioned within Area III should complement the objectives of the Downtown Specific Plan by encouraging retail and tourism-oriented or visitor-serving facilities. Given this goal, the primary uses for Area III are retail shopping centers, theaters, convention centers, hotels, health or athletic clubs and performing arts centers.

General Industry

This designation provides additional employment opportunities in Cloverdale. It is the intent of this designation that industrial uses (light and quasi-heavy) have little environmental effects as possible. The placement of this designation is located away from residential uses and sensitive habitats where possible. Primary uses include light-manufacturing, limited manufacturing, industrial parks, wineries, lumber mills, assembly, warehousing and distribution. Secondary uses include professional office and research and development. The maximum allowable floor area ratio (FAR) is 0.35.

This designation is applied to the following areas:

- South Industrial Area being south of the Rancho de Amigos project, west of Cloverdale Boulevard, east of Foothill Boulevard, and north of Dutcher Creek Road.
- Barnes Lumber east of Cloverdale Boulevard in north City Limits.
- Immediately west of the City Airport.
- MGM Brakes and other adjacent parcels north of south interchange and east of Cloverdale Boulevard.
- West of railroad tracks and east of Business Park area and adjacent to Santana Road area.

Business Park

This designation provides additional service-oriented employment opportunities in Cloverdale. Primary uses include professional office and research and development. Secondary uses include limited light industry, industrial parks, wineries, warehouses, and nurseries. This designation applies to the Ranch de Amigos development plan, as it was approved for such uses in 1985, and the properties lying west of industrial lands and east of Cloverdale Boulevard. The maximum allowable floor area ratio (FAR) is 0.35.

Public/Quasi-Public

This designation provides for government-owned facilities, public and private schools, parks and cultural facilities, and quasi-public uses. Residential, commercial and industrial uses are discouraged. This designation is applied city-wide to encompass such facilities as the City sewage and water treatment and distribution facilities, churches, libraries, schools, special care facilities, and the City airport.

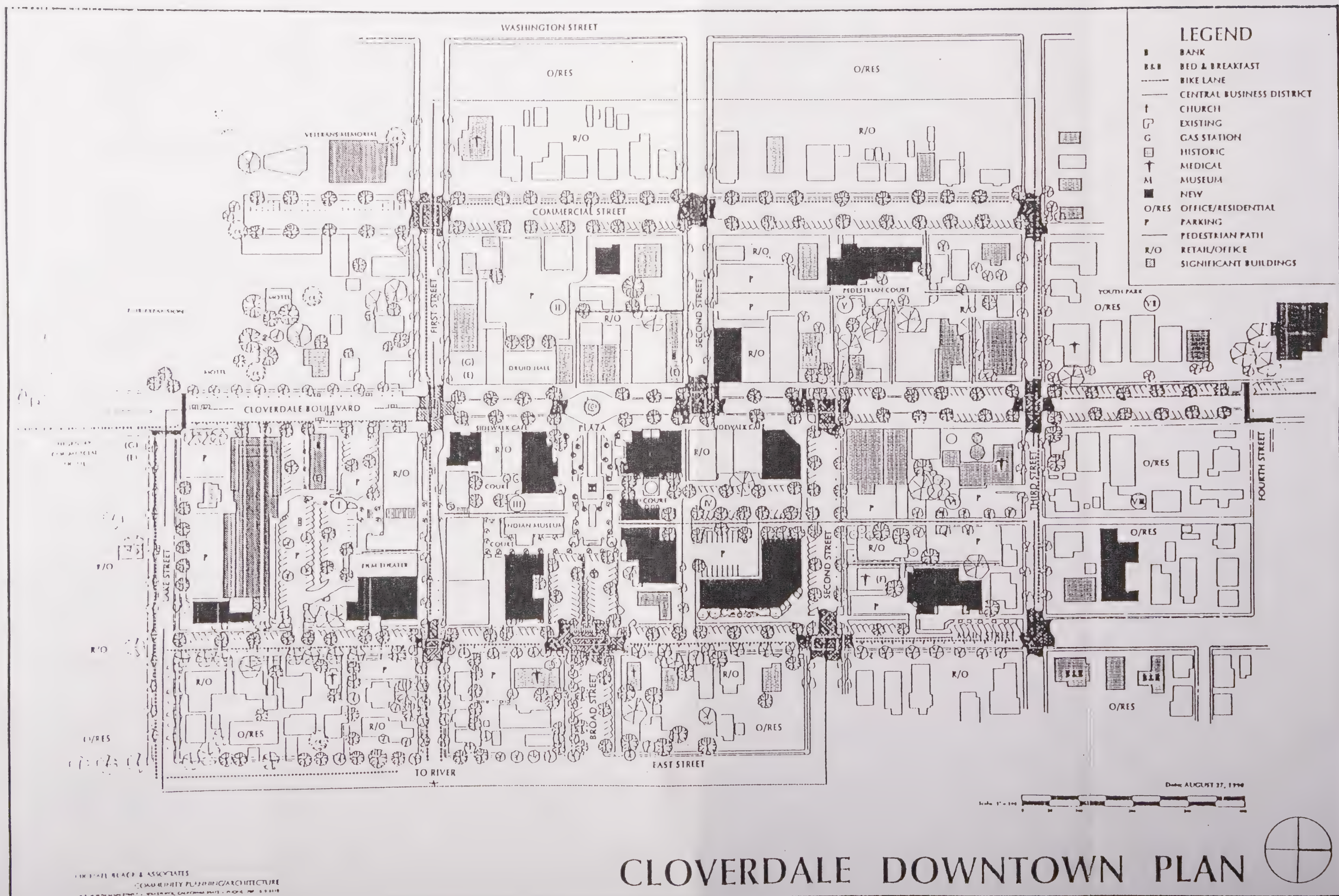
Allowable uses include parks, schools, airports, medical or special care facilities, non-profit service uses/organizations, and government buildings. Proposed and existing parks, schools and City facilities are indicated with symbols. Public and quasi-public uses are also allowed in all other land use designations when compatible with the overall purpose and character of the designation.

Conservation Features

The purpose of this designation is to manage and preserve valuable biological, visual, and agricultural resources in the Cloverdale Planning Area. Primary uses include river/stream-related recreation, open space buffers, and agricultural production. Setbacks of 50 feet from tributaries are encouraged, and between 300 feet to 1,000 feet around the Russian River. These buffers will be indicated on a Conservation Element Map. Agricultural production is encouraged on lands located away from the urban fringe. Secondary uses include very low density single-family residential.

The areas shown as Conservation Feature and the intent of such designation is described below:

- Western ridgelines: Preserve profile of significant ridgelines.
- Highway 128 Corridor: Preserve corridor in agricultural uses and discourage commercial development.
- City Airport: Discourage development in clear zone.



PROPOSED CIRCULATION PLANS AND DIAGRAMS

The development of the General Plan will require roadway expansions, additions, and improvements. Based on preliminary projections and findings, the following physical circulation improvements are recommended to address the projected future needs.

1. Construct Treadway Drive between Foothill Boulevard and Cloverdale Boulevard.
2. Install traffic signals at the intersections of Cloverdale Boulevard/Southern Interchange Connection and Cloverdale Boulevard/Treadway Drive. These two new traffic signals should be coordinated through a hardware interconnection system.
3. Construct Foothill Boulevard per the planline adopted by the City, parallel to and west of Cloverdale Boulevard. Construct the southerly extension of Foothill Boulevard from the Cherry Creek subdivision to provide an additional access outlet.
4. Construct First Street extension connecting the Foothill Boulevard extension.
5. Construct South Street extension to connect to Foothill Boulevard and Franklin Street.
6. Connection to the U.S. 101 downtown interchange should be made to provide an effective four-way intersection with Cloverdale Boulevard and the Citrus Fair Road. This intersection should be signalized by Caltrans prior to its operation.
7. Realign the south end of Franklin Street to provide a standard right angle approach to Cloverdale Boulevard.
8. Develop a policy for desired traffic flow operations on Cloverdale Boulevard in the Downtown Business District.
9. Coordinate with Caltrans to provide highway signage which would direct State Route 128 traffic to the northern U.S. 101 interchange.
10. Install traffic signals at major intersections as indicated by the traffic analysis and City-Wide Traffic Mitigation Program.

Exhibit 4 shows the proposed Circulation Plan. Roadways will be developed according to new standards to be adopted partially based on the recommendations of the Traffic Analysis report. The Circulation Plan will be updated after development of the traffic analysis for the Environmental Impact Report and adoption of the City-wide Traffic Mitigation Program.

Tables C and D indicate the County of Sonoma Highway Plan and Transit Plan Concepts. The City of Cloverdale supports the County General Plan Circulation Element.

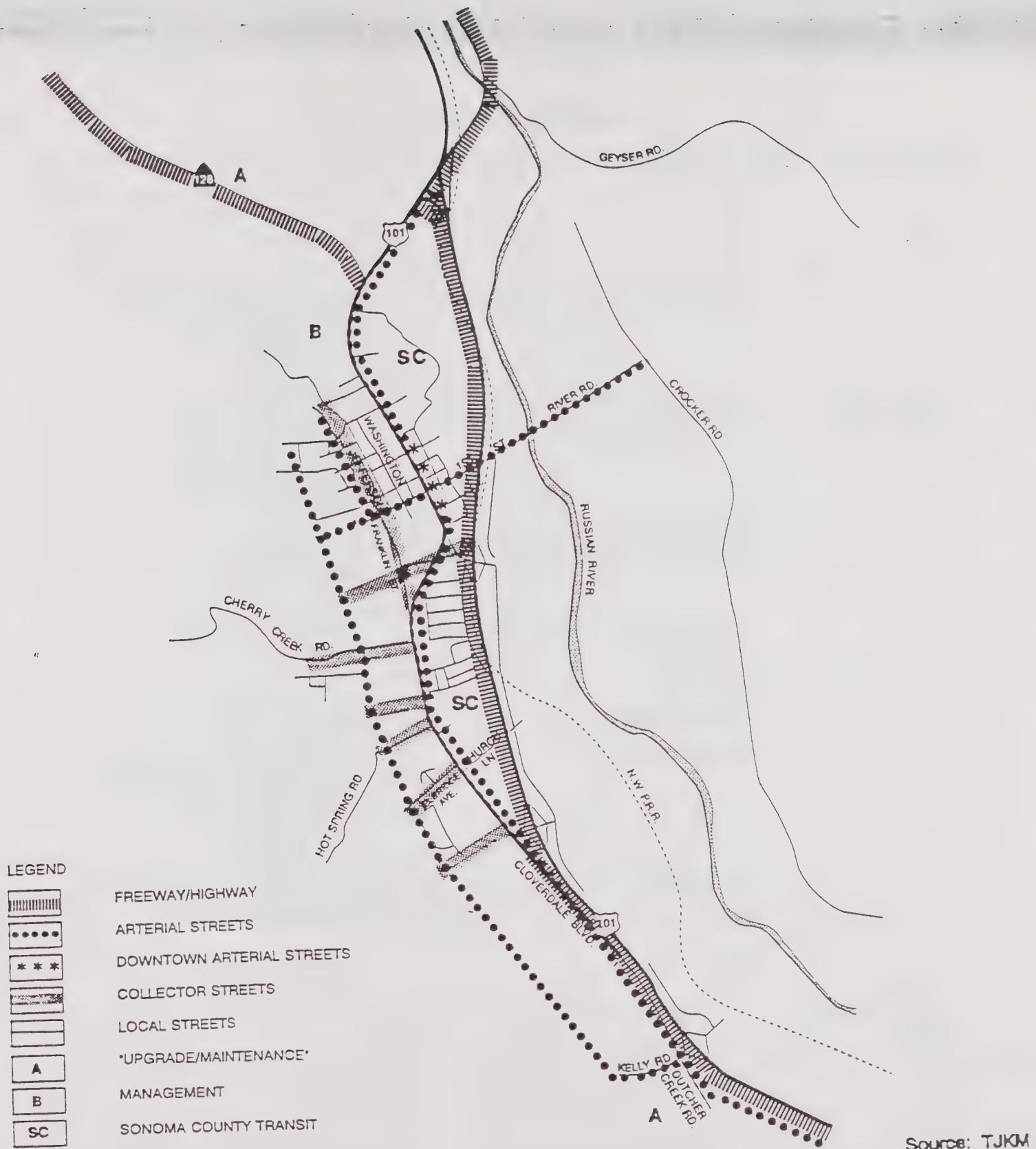
ADEQUATE HOUSING SITES

State law requires that a community identify adequate sites for the development of a variety of housing types:

Identify adequate sites which will be made available through appropriate zoning and development standards and with public services and facilities needed to facilitate and encourage the development of a variety of types of housing for all income levels, including *rental housing, factory-built housing, mobile homes, emergency shelters, and*

transitional housing in order to meet the community's housing goals as identified in subdivision (b). [emphasis added] Government Code Section 65583(c)(1).

Based upon the Preferred Plan current zoning, Exhibit 5 indicates adequate sites for rental housing, factory-built housing, mobile homes, and emergency shelters. The net dwelling unit capacity under the Preferred Plan equals 1,607. Considering current zoning only the MEA estimated approximately 2,000 units. The Zoning Code will be amended according to Housing Element Policies and to reflect the final chosen land use plan. The Subdivision Code will be updated to state requirements. Proposed adequate sites represent potential housing development sites. Although the City will provide incentives, due to landowner preferences, market forces, and other factors, these sites may not develop with the proposed housing type.



CIRCULATION PLAN

GENERAL PLAN

City of Cloverdale

4



**TABLE C
HIGHWAY PLAN CONCEPTS**

FUNCTIONAL CLASSIFICATIONS

Category	Function	Types of Standards
Freeway	Carry interurban, regional and interstate traffic	Number of travel lanes, controlled access, divided by median or barriers, grade-separated interchanges.
Primary Arterial Secondary Arterial	Carry large traffic volumes over long distances; county-wide or regional importance; connect major traffic operators	Number of travel lanes, driveway spacing signalization, parking restrictions, right-of way width, roadway width
Major Collector Minor Collector	Carry local area traffic to the arterial system	Number of travel lanes, signalization, right-of-way width, roadway width
Local Road	Provide access to property; carry local traffic	Number of travel lanes, right-of-way width

IMPROVEMENT CATEGORIES

<u>Map Category</u>	<u>Category Name</u>	<u>Types of Improvements</u>
A	"Upgrade/maintenance"	Safety improvements, curvature reductions, traffic control devices, minor pavement widening, resurfacing, intersection improvements/turn lanes
B	"Management"	Widening for continuous turn lanes, bridge widening, intersection improvements
C	"Major project"	Additional through travel lanes to expand capacity

Continued.

**TABLE C (Cont.)
HIGHWAY PLAN CONCEPTS**

LEVEL OF SERVICE (LOS)

Level	Traffic Condition
LOS "A"	<ul style="list-style-type: none"> •Free flow conditions •Low volumes •High operating speed •Uninterrupted flow •No restriction on maneuverability •Drivers maintain desired speeds •Little or no delays
LOS "B"	<ul style="list-style-type: none"> •Stable flow condition •Operating speeds beginning to be restricted
LOS "C"	<ul style="list-style-type: none"> •Stable flow but speed and maneuverability restricted by higher traffic volumes •Satisfactory operating speed for urban conditions •Delays at signals
LOS "D"	<ul style="list-style-type: none"> •Approaching unstable flow •Low speeds •Major delays at signals •Little freedom to maneuver
LOS "E"	<ul style="list-style-type: none"> •Lower operating speeds •Volume at or near capacity •Unstable flow •Major delays and stoppages
LOS "F"	<ul style="list-style-type: none"> •Forced flow conditions •Low speeds •Volumes below capacity, may be zero •Stoppages for long periods because of downstream congestion

Source: Sonoma County General Plan 1989

**TABLE D
TRANSIT PLAN CONCEPTS**

TYPES OF TRANSIT SERVICES AND TRANSIT OPERATORS

Service Type	Characteristics	Transit Operators
Inter-County Commute Service	Weekday line-haul service centered to peak period; express routing; may be on shared or separate right-of-way. May serve Trans-Bay (S.F.) and Marin employment centers.	Golden Gate Transit
Basic Regional Service	Daily service, including weekends; serves variety of destinations; all-day service; fixed routes and schedules.	Golden Gate Transit Mendocino Transit Authority
Intra-County Service	Basic Transit and commute transit between cities and/or communities within Sonoma County; express service during commute; fixed routes and schedules.	Sonoma County Transit
Local Area Service	Routes confined to a single urban area; fixed routes and schedules.	Santa Rosa, Petaluma, Cloverdale, Healdsburg, and Sebastopol Municipal
Paratransit Service	Door-to-door service; unscheduled; subscription transit services.	Private companies and agencies

FIXED CAPITAL FACILITIES/OPERATING ELEMENTS

Fixed Facilities	Operating Elements
•Exclusive rights-of-way/guideways for transit vehicles	•Routes and Route Networks
•Transfer or "Transit Centers"	•Frequency of Service/Headways
•Bus Turnouts	•Schedules
•Passenger Shelters	•Fares
•Park-and-Ride Lots	
•Maintenance and Administrative Facilities	

Source: Sonoma County General Plan 1989



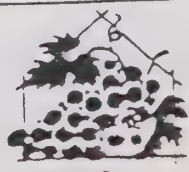
Refer to Appendix F of the Master
Environmental Assessment for
the corresponding information
on the Adequate Sites Land Survey.

Source: STA Planning, Inc.

ADEQUATE HOUSING SITES

GENERAL PLAN

City of Cloverdale



no scale

EXISTING AND PROPOSED PARKLAND SITES

Exhibit 6 indicates the existing and proposed parks as determined by the Parklands Advisory Committee's report. The one site shown on the map as a "PP" was not included in the Committee's report, but suggested in a meeting by the General Plan Update Citizen's Advisory Committee. Refer to the Parklands and Recreation Element for further explanation.

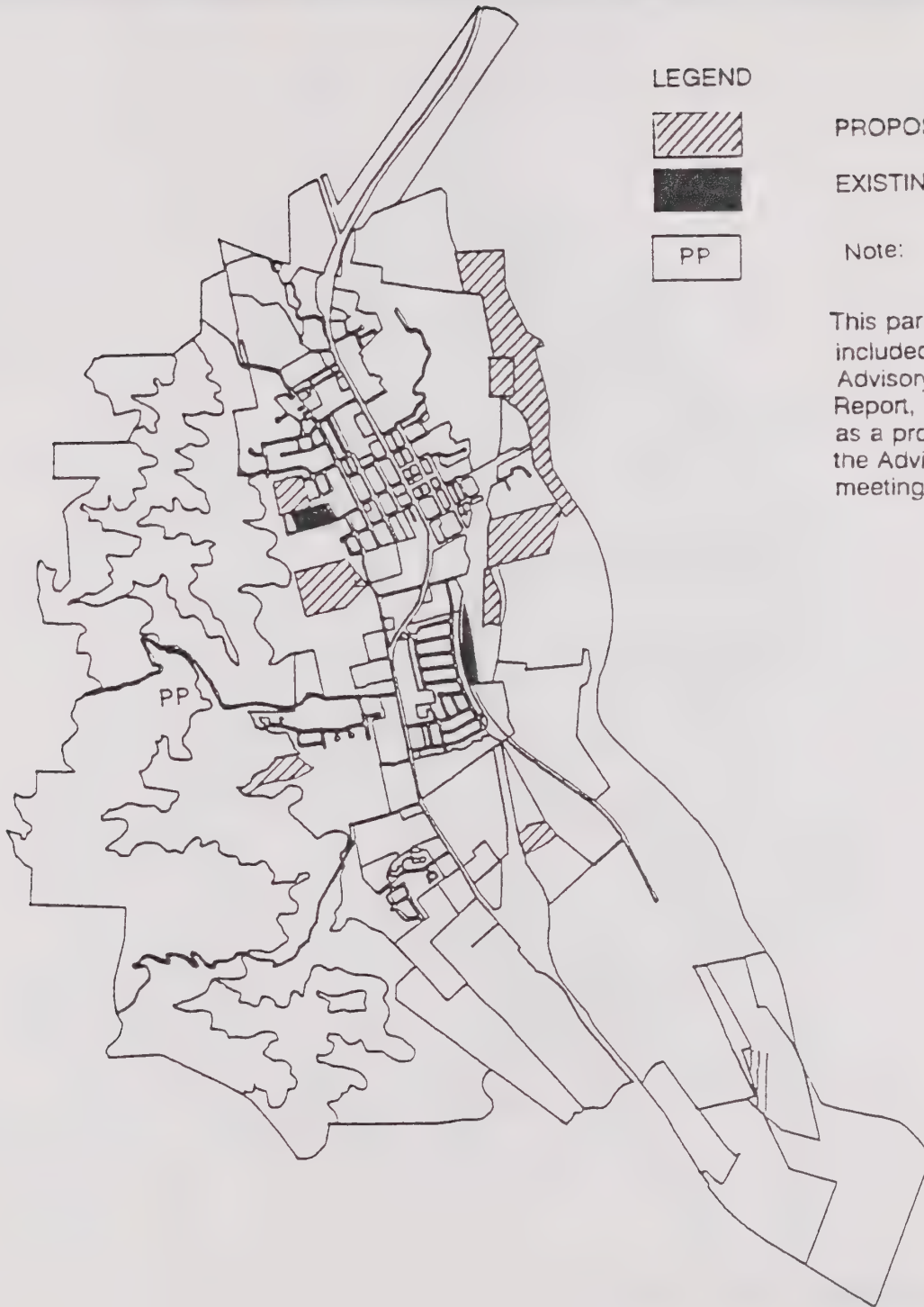
CONSERVATION/OPEN SPACE ELEMENT MAP

Exhibit 7 indicates the buffers needed to protect the ridgelines, viewsheds, City airport, river/creeks, and watershed areas. The ridgeline buffers total 150 feet with 75 feet ridgeline from either side of the ridgeline. The river/creek buffers total 100 feet with 50 feet from the centerlines. Refer to the Conservation/Open Space Element for further explanation.

NOISE CONTOURS

State law requires that a community identify existing and projected levels of noise and noise contours for major noise sources. Existing and Future Contours are indicated on Exhibits 8 and 9.

The noise contours are based on unconstrained traffic volumes. Noise contours will be updated subsequent to more detailed analysis provided in the Environmental Impact Report.



Source: STA Planning, Inc.

EXISTING AND PROPOSED PARKS

GENERAL PLAN

City of Cloverdale



6



no scale



LEGEND

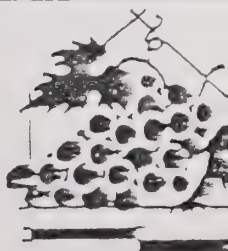
-  PROMINENT RIDGELINE BUFFERS
-  RIVER/CREEK BUFFERS

Source: STA Planning, Inc.

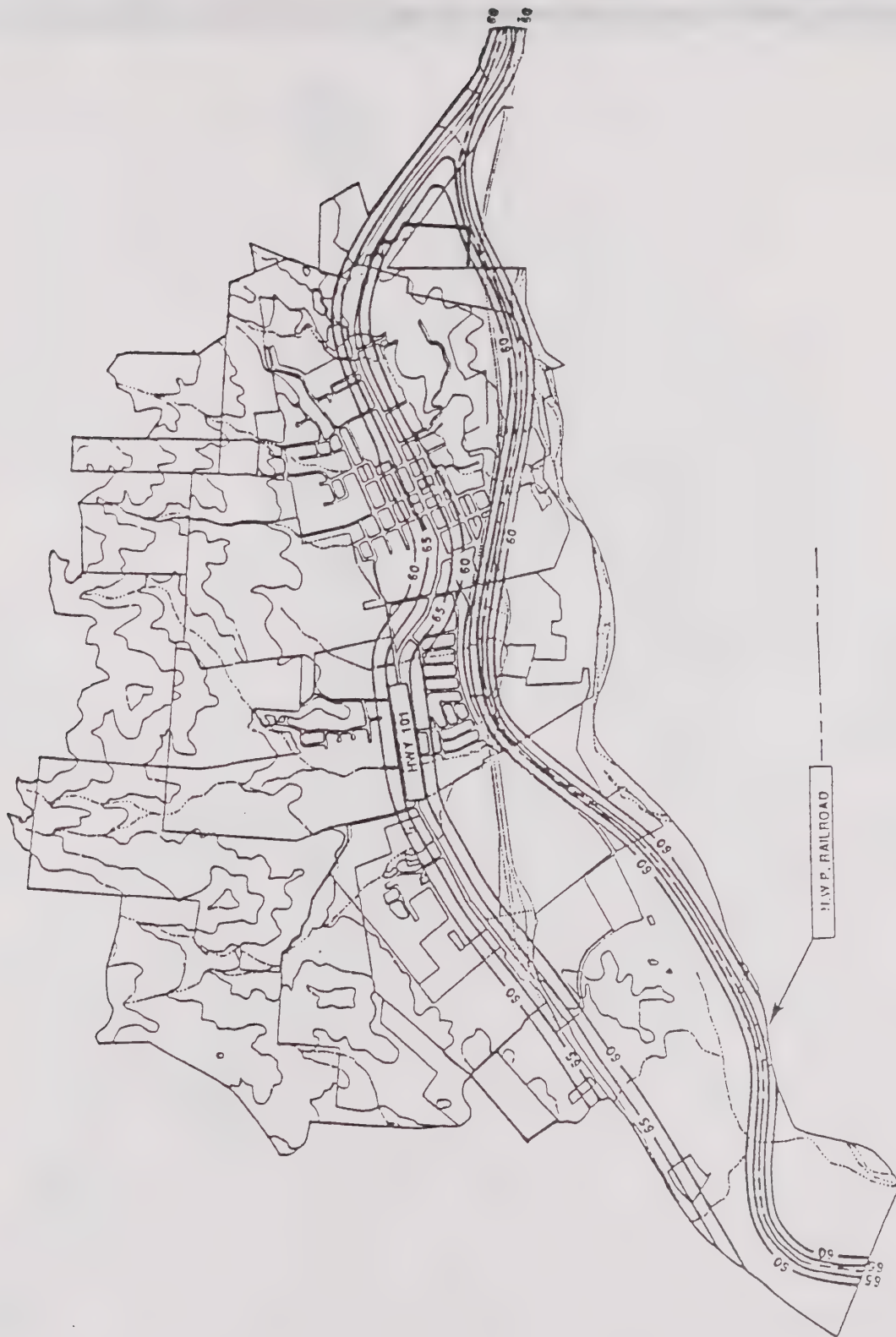
CONSERVATION/OPEN SPACE ELEMENT MAP

GENERAL PLAN
City of Cloverdale

7



no scale



Source: Mestre Greve Associates

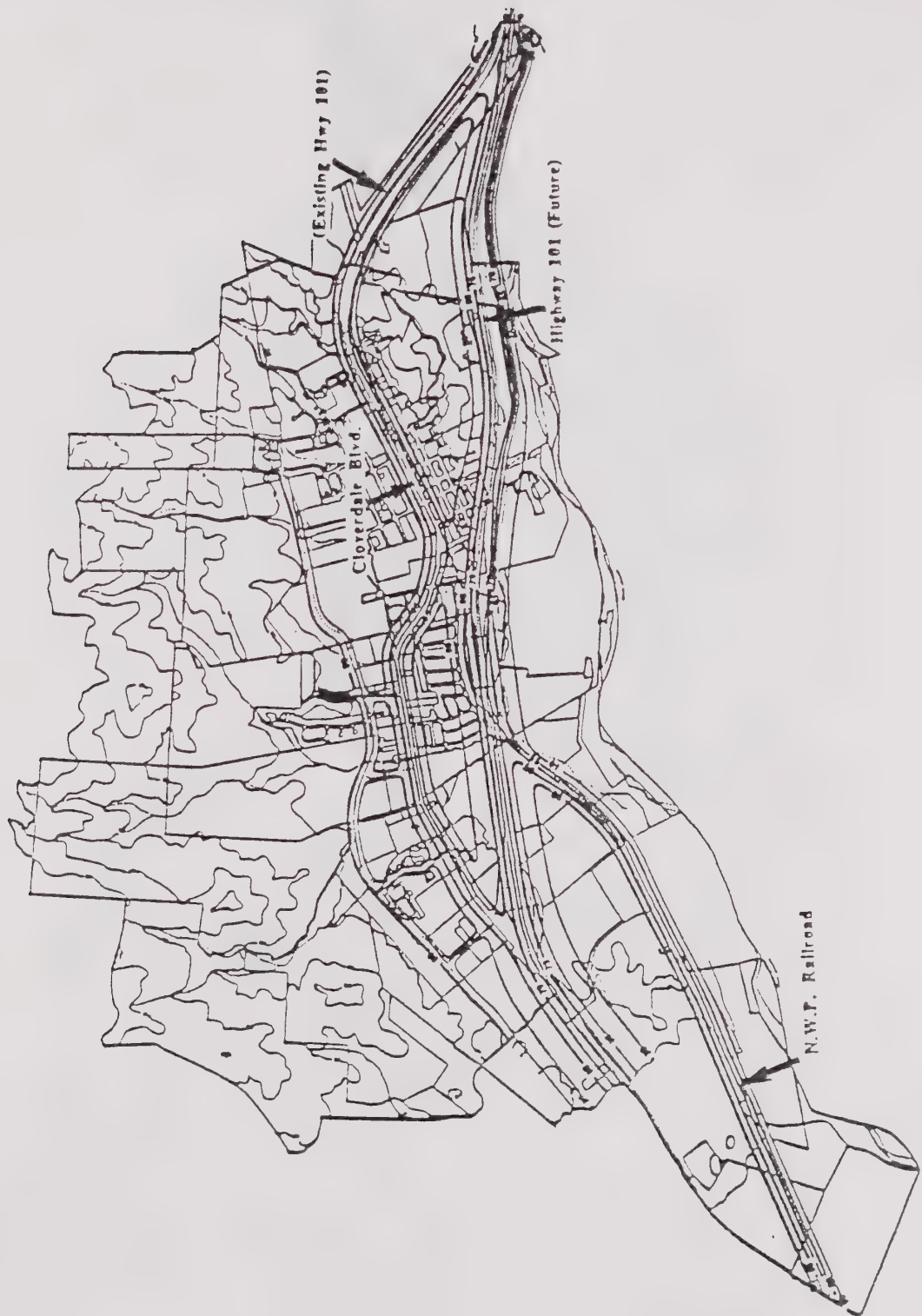
EXISTING CNEL NOISE CONTOURS

GENERAL PLAN

City of Cloverdale

8





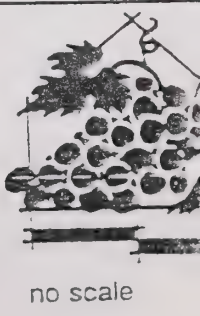
Source: Mestre Greve Associates

FUTURE CNEL NOISE CONTOURS

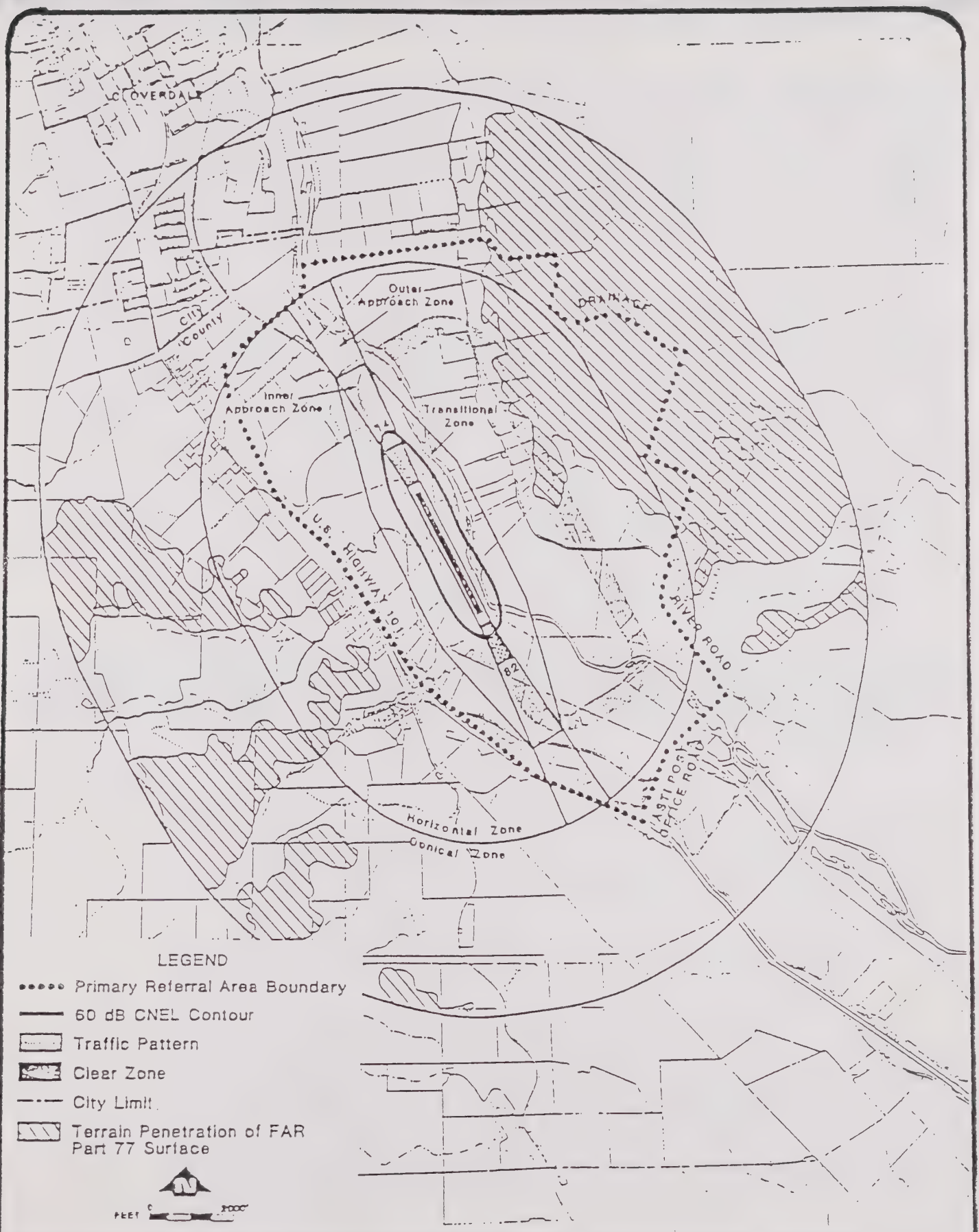
GENERAL PLAN

City of Cloverdale

9



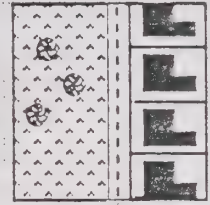
no scale



CLOVERDALE MUNICIPAL AIRPORT REFERRAL AREA

10

LAND USE ELEMENT



INTRODUCTION

The Community Development Land Use Element describes the general distribution and intensity of uses of the land for housing, business, industry, open space, education, public buildings and grounds, waste disposal facilities, and other public and private uses. The Community Development Land Use Plan in the Element Plans and Diagrams section of this report includes a statement of the standards of population density and building intensity recommended for the City of Cloverdale. The Community Development Land Use Element plays the central role of correlating all land use issues into a set of coherent development policies. Its goals, policies, and programs relate directly to the other elements.

Several major findings were made in the General Plan Master Environmental Assessment (MEA) and Issues and Options report including: approximately one-third of the existing land in the City of Cloverdale is used for single-family residential uses; and there are approximately 1,575 vacant acres in the study area.

GOALS, POLICIES, AND IMPLEMENTATION PROGRAMS

GOAL A: TO PROVIDE FOR ORDERLY DEVELOPMENT WITHIN THE CITY OF CLOVERDALE'S GENERAL PLAN STUDY AREA.

Policies

1. Ensure that high intensity/density development does not adversely impact adjacent uses with a lower intensity/density development.
2. Regulate building height to avoid obtrusive breaks in the natural skyline, and to be responsive to the surrounding setting.
3. Encourage infill development on vacant properties with existing public services and utilities.
4. Balance residential, commercial, industrial, and public land uses.
5. Review and comment on any developments proposed on County lands within the Study Area. Encourage the County to recognize the City General Plan for those lands outside City Limits and to approve development which is consistent with this document.
6. Encourage the expansion and diversification of the local employment base so as to achieve a Jobs-Housing Balance.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will amend the Zoning Code to insure that proposed commercial development abutting residential uses provides for ample building setbacks and buffering.
2. The City will amend the Zoning Code to require multi-family structures located adjacent to single-family parcels to incorporate adequate screening into project design to prevent view intrusion.
3. The City will establish a 6,000 square foot minimum lot size for all detached single family dwellings on parcels between Foothill Boulevard and the 400 foot elevation. For larger properties within this designation, the 6,000 square foot minimum maybe applied on an overall density by "clustering" the units or reducing lot sizes in order to provide increased open space, parkland or protect any natural or scenic resource.
4. Through project and environmental review, the City will prioritize development on infill parcels with existing public services and utilities.
5. The City will discourage General Plan Amendments that affect the balance of land uses such as uses which would create a jobs/housing imbalance.
6. The City will establish a "Cluster Density Ordinance" for residential properties, to provide innovative detached housing development for the purposes of housing affordability or increasing the amount of open space.
7. The City will encourage and assist in the preparation of Master Utility Plans and Specific Plans for Industrial/Business Park Areas (middle interchange area) and Destination Commercial Areas I and II, respectively. The uses within Destination Commercial Areas I and II should be consistent with those definitions applied in the "Land Use Designations" section of this document. The City will work with property owners in these areas to assure that nonconforming uses are phased out slowly under appropriate market conditions and when Master Plans and Specific Plans encourage conversion.
8. The City will monitor the conversion and phasing of development within the Destination Commercial Areas and prepare a report every five (5) years.
9. The City will petition LAFCO to expand its Sphere of Influence to include the Urban Service Area. If the expansion of utilities, and availability of public services for expansion beyond this area are resolved, the City will work with property owners to petition LAFCO to include the Study Area. The City will ensure to the greatest extent possible that development on County lands is compatible with the City General Plan.

GOAL B: TO REINFORCE THE DOWNTOWN AS THE COMMERCIAL AND CULTURAL CENTER OF CLOVERDALE IN SUPPORT OF TOURISM AND THE LOCAL ECONOMY.

Policies

1. Support the implementation of the Downtown Specific Plan. Continue the phasing of improvements to the downtown relating to streetscaping, parking, building exteriors, circulation, signage, etc. per the plan to stimulate and enhance business activity.
2. Discourage the creation of satellite visitor-serving commercial areas or strip commercial centers with visitor-serving commercial uses which would adversely affect the viability of the Downtown.
3. Meet resident oriented demand for goods and services. Encourage the retention of local serving businesses.
4. Plan for and manage tourism activities in such a way as to minimize any adverse impact to other segments of the economy, and the resident population.
5. Discourage the establishment of commercial or retail uses east of, or adjacent to the central Highway 101 interchange which are detrimental to the goals of the Downtown Specific Plan.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will implement the Downtown Plan through project and environmental review and Capital Improvements Plan.
2. The City will encourage the development of additional restaurants, stores, and offices within the downtown areas through the following:
 - Develop City sponsored, financial assistance programs to provide awnings and covered walks, remodel buildings (including structural upgrading) and to replace signage.
 - Rezone portions of the downtown area to higher density mixed use development.
 - Develop an advertising campaign for the Downtown area.
3. Through the General Plan, Zoning Ordinance, and project review, the City will limit the expansion of existing shopping centers and the development of new shopping centers outside the Downtown, only allowing food markets and other neighborhood-related uses, such as cleaners, laundromats, video stores, pharmacies, hair salons, delicatessens. Comparison goods uses can be allowed when their effect on the Downtown would be minimal.

4. Through the General Plan, Zoning Ordinance, and project review, the City will regulate commercial development near the middle interchange. Commercial uses shall be avoided on the east side of the interchange. The City will discourage highway oriented transient related uses adjacent to, and visible from this interchange.
5. Through the General Plan, Zoning Ordinance, and project review, the City will encourage medium density residential development (including affordable) along the edges of the Downtown to provide support for and easy access to the interchange.
6. The City will encourage the expansion of Downtown activity hours.
7. The City will require and assist in the preparation of a Specific Plan for the properties designated as Areas I and II within the Destination Commercial designation. The City will encourage that the Specific Plans for Areas I and II and any planning document for Area III incorporate and reflect the uses prescribed for these areas. (Reference: p. 14)

**GOAL C: ACCOMMODATE NEW DEVELOPMENT THAT IS
COORDINATED WITH THE PROVISION OF
INFRASTRUCTURE AND PUBLIC SERVICES.**

Policies

1. Ensure adequate water and wastewater capacities or improvements are in place prior to granting approval for new development.
2. Provide adequate public facilities and services to meet the needs of the community.
3. Discourage development beyond areas with planned expansions of sewer, water, and road systems. Develop a growth phasing plan that addresses location and timing of development and infrastructure.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. Through a growth phasing plan and environmental review process, the City will monitor new development to ensure the adequate provision of water and wastewater services.
2. The City will provide for the construction of the following facilities through appropriate financing mechanisms outlined in the Downtown Plan, Police/Fire Master Needs Assessment, Capital Improvement Plan, and Corporate Powers:
 - a new police facility
 - an additional fire substation or central station
 - an upgraded and expanded library
 - a public swimming pool for school and recreation

- a senior citizen center
- new school sites as population levels warrant
- a youth recreation center
- a bicycle pathway network

3. The City will ensure that new development is phased concurrently with planned infrastructure expansions. The City will develop a growth phasing plan which considers the following outline:

A. Purpose and Authority: specify what type of development the plan applies to.

B. Application Requirements: specify submittal information required.

C. Growth Management Objectives:

1. Provide for a rate and quality of residential growth which is consistent with the goals and policies of the City's General Plan.
2. Coordinate residential growth with the provision of needed public improvements and services.
3. Maintain and enhance levels of essential City services.
4. Provide for the orderly development of remaining undeveloped areas.
5. Allow for planning and funding of public improvements, utilities and services commensurate with the City's ability to absorb these costs.
6. Provide sufficient opportunity to adequately evaluate the environmental impacts and social and economic consequences of residential developments.
7. Provide a range of housing opportunities for all economic segments of the community.
8. Permit the school districts to adequately prepare for increased demands created by additional growth.
9. Balance residential growth with local industrial development or employment base.

D. Evaluation Criteria: specify the rating system.

1. Location.
2. Design.
3. Affordability.
4. Jobs/Housing Formula.
5. Other criteria deemed appropriate.

E. Project Selection Procedures: specify which governmental body will make the selections.

4. The City shall not extend new water or sewer to areas outside the Urban Service Area. New water or sewer service shall not be extended to areas outside the City Limits prior

to annexation, except in extraordinary circumstances. Existing services for water and sewer service shall continue to be honored. If any services are extended in extraordinary cases prior to annexation, the landowner shall agree in writing to commit and participate in any future annexation of the property.

GOAL D: PRESERVE AND ENHANCE CLOVERDALE'S SMALL-TOWN CHARACTER AND THE EXPERIENCE OF ITS NATURAL SETTING.

Policies

1. Allow only very low and low intensity land uses in areas characterized by steep slopes, environmental hazards, and scenic ridgelines and hillsides.
2. Encourage clustered development in areas of ecological sensitivity.
3. Provide for appropriate and sensitive developments in hillside areas.
4. Maintain views of ridges and hillsides. To maintain a network of open space and achieve functional linkages between major City open spaces.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will retain areas for visual amenities through development controls to protect the ridgeline and provide for site and design review of all development proposals as outlined in the Conservation/Open Space and Community Design Elements. The City will ensure protection of the natural landforms and vegetation of the hills (above 400') to a reasonable extent, particularly along ridgelines and in areas characterized by steep slopes.

Development considerations will include:

- A. Ensuring that hillside development is related to the "view from the valley", particularly from a scenic roadway.
 - B. Encouraging compact development is screened by trees or other natural features.
 - C. Relating building design, color, height, and placement to terrain and natural features.
 - D. Maintaining ridgelines and view of natural landmarks such as the Russian River, Red Mountain, Pine Mountain, or western slopes.
2. Through the environmental review process, the City will analyze areas of ecological sensitivity in relation to proposed development.

3. The City will amend its PUD Ordinance to further allow for creative, sensitive, clustered development in hillside areas.

GOAL E: MAINTAIN AND ENRICH CLOVERDALE'S QUALITY OF LIFE ENCOMPASSED IN ITS FRIENDLY, RURAL, SMALL TOWN ATMOSPHERE.

Policies

1. Enhance major entrances to Cloverdale in order to provide definitive gateways to the City.
2. Protect and enhance the visual corridors of scenic routes.
3. Regulate the location of fast food chains within the General Plan Study Area. Avoid the location of such uses within the Downtown Business District and encourage within the South Interchange area.
4. Encourage compatible development on adjacent County lands.
5. Encourage elimination of blighted conditions in downtown Cloverdale to enhance affordable housing, job opportunities, and historical preservation.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will prepare an Urban Design Plan for selected entrances to the City and interchanges as outlined in the Community Design Element.
2. The City, in conjunction with the County, will investigate official designation of Highways 128 and 101 as Official State Scenic Highways.
3. Using citizen input, the City will develop guidelines for each proposed scenic route corridor as required by the state, including guidelines for land use, site planning, outdoor advertising, landscaping, earth moving, and design.
4. The City will develop Zoning Code provisions to require that new development at the major entrances to the City be aesthetically pleasing in design, provide buffering between land uses, and retain open space and unique land features as outlined in the Community Design Element.
5. The City will establish a scenic highway overlay in the Zoning Code to ensure development retains scenic vistas along Highways 128 and 101.
6. The City will approve development that will strengthen the community's identity while balancing the tourism/destination economy.

7. The City will discourage highway-oriented, chain fast-food establishments from locating within the Downtown Business District. Any such development will require a Conditional Use Permit and may be subject to extensive Design Review.
8. Through the environmental review process, the City will analyze County-proposed developments for compatibility with adjacent City uses.
9. Support the implementation of the Downtown Specific Plan and Capital Improvements Plan to encourage landscape, cosmetic, and structural improvements.

GOAL F: TO PROVIDE APPROPRIATE REGULATIONS OF LAND USE AND AIRPORT OPERATIONS TO ENSURE THAT THE SAFETY OF AIRPORT OPERATIONS AND PERSONNEL AND THE GENERAL PUBLIC AND ADJACENT STRUCTURES ARE PROTECTED.

Policies

1. Future development and use of the City Airport shall be consistent with the policies and programs as established in the Cloverdale Municipal Airport Master Plan as adopted in October 1988. Any proposals for expansion and/or development of the airport shall be referred to the Sonoma County Airport Land Use Commission.
2. Make every effort to ensure that runway length and safety areas meet Federal Aviation criteria.
3. Ensure that approach zones, clear zones, and landing thresholds are maintained to Federal Aviation Regulations and State Division of Aeronautics.
4. Protect the airport property from erosion and flooding hazards.
5. Building sites on the airport property should be clustered in areas outside the approach zone and overflight zone, and set back as deemed appropriate from the extended runway centerline and typical flight tracks.
6. Discourage residential, noise-sensitive developments or significant expansions hereto located near the airstrip or under an overfly route. The area of concern with future development lies within "referral area" delineated by the County Airport Land Use Commission. (See Exhibit 10) Until future annexation, the City will work with the County in unincorporated areas to ensure that developments are required to dedicate airport easements, deed restrictions or file "buyer beware" notifications to ensure that prospective buyers are aware of the airport's influence. The restrictions shall include the following as appropriate:
 - a. A right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (set in accordance with Federal Aviation Regulations Part 77).
 - b. A right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with normal airport activity.

- c. A right to prohibit the erection or growth of any structure, tree or other object that would enter the acquired airspace.
 - d. A right-of-entry onto the property, with appropriate advance notice, for the purpose of removing, marking or lighting any structure or other object that enters the acquired airspace.
 - e. A right to prohibit electrical interference, glare, misleading light sources, visual impairments, and other hazards to aircraft from being created on the property.
7. Prohibit objects or structures to be erected in critical areas which, because of height or other factors, would result in an increase in the minimum ceiling or visibility criteria for an existing or proposed instrument approach procedure.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

- 1. The City will implement the Cloverdale Municipal Airport Master Plan. The plan shall be regularly reviewed and updated as appropriate. An airport safety ordinance should be prepared to address height limitations, buildings locations, approach zone(s) and land use restrictions for the lands affected by the operation of the airport. Provisions of the ordinance should also require discretionary permits for any use or structure.
- 2. The City will work with Louisiana Pacific or future adjacent property owners to ensure that height limitation standards are met for the Runway 14 Clear Zone.
- 3. The City will monitor erosion control work and consider levees or rip-rap protection for the Airport property.
- 4. Through Master Plan, environmental, and project review, the City will ensure that building areas take into account the flood potential at the south-end of the airport.
- 5. The City will issue timely FAA Notices to Airmen to advise airport users of any flooding as it occurs.
- 6. Through the Zoning Ordinance, environmental, and project review, the City will ensure building sites on the airport property are located appropriately to avoid safety hazards.
- 7. Through environmental and project review, the City will regulate property located near the airport such that no structures are constructed which would interfere with aircraft operations.
- 8. The City shall ensure that through Master Plan, project, and environmental review, any change in the length or location of runway use shall require safety studies to determine the measures needed to ensure safe airport operations and that adjacent/nearby land uses will not be adversely affected.
- 9. Through the General Plan, Zoning Code, and environmental review, the City will strongly discourage new residential development within the 55 CNEL contour, and discourage inappropriate land use developments beneath the aircraft traffic pattern. The

City will utilize the "Airport/Land Use Noise Compatibility Criteria" in evaluating the acceptability of development proposed within the "referral area" boundary.

10. The City will work with the County and the Sonoma County Airport Land Use Commission to ensure consistency in the application of land use regulations on all projects proposed within the "referral area" (See Exhibit 10).
11. The City will work with the County and private property owners to ensure the airport access road is widened and well-maintained.

HOUSING ELEMENT



INTRODUCTION

The Housing Element consists of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The Housing Element identifies adequate sites for housing, including rental housing, factory-built housing, and mobilehomes, and makes adequate provision of the existing and projected needs of all economic segments of the community. Refer to Exhibit 5 for an adequate sites map.

The purpose of the Housing Element is to provide the data and policies that assist Cloverdale in reaching the goal of safe, habitable, and affordable housing for all its citizens. Housing production and affordability, however, are affected by many factors, including federal and state policies, the health of the economy, and the distribution of income. Many of these factors are outside the control or influence of local government. Nevertheless, the City and the community will continue and intensify the effort to make habitable and affordable housing available to all residents.

As of this date, the City has approximately 2,184 housing units and a population of approximately 5,200. The Sphere of Influence contains an additional 1,200 estimated residents occupying about 500 units. The Association of Bay Area Governments (ABAG) projects that in the years from 1988-1995, Cloverdale will need to provide 783 residential units, of which 524 units will need to be geared to "affordable" housing levels.

During the period of 1988 to 1992, 281 residential units have been constructed and occupied, of which 140 units have been classified as being within the "affordable" income range of the community. If the ABAG projections were used, the City would need to encourage the construction of 511 units by 1995, 384 designated as "affordable", which amounts to 170 units per year. The realization of this ABAG 1995 projection for Cloverdale will be directly effected by the following constraints:

- Limitation on sewage plant connections (approximately 410 remain)
- Limitation of water collection and treatment system
- Limitation of road system until construction of Highway 101 Bypass
- Limitation of public safety services
- Limitation of local school system

Several major findings were made in the General Plan Master Environmental Assessment (MEA) including: Sixteen percent (16%) of the City's housing stock is in poor condition; no second units have been constructed although a second unit ordinance was adopted in August of 1983; there are 263 (44%) of lower income Cloverdale households paying more than they can afford for housing expenses; potential constraints to development of future housing include water, sewer (currently the City has only 410 residential equivalent sewer connections available), streets, and storm drains; and, vacant and underutilized sites in Cloverdale can accommodate approximately 2,000 dwelling units under current zoning on identified adequate sites. The Preferred Plan can accommodate 1,607 units considering proposed designations on the identified adequate sites.

GOALS, POLICIES, AND IMPLEMENTATION PROGRAMS

GOAL A: TO PROVIDE A RANGE OF HOUSING TYPES FOR ALL ECONOMIC SEGMENTS OF THE CLOVERDALE COMMUNITY.

Policies

1. Make every effort to provide affordable housing for those people who live and work in Cloverdale, to meet all income levels, and to meet the City's fair share of housing as based on local and regional needs.
2. Provide information to the public and developers on approved residential projects and vacant land supply.
3. Use local, State, and Federal funding assistance, to the extent that these subsidies exist and are appropriate to Cloverdale's needs, to assist the public and developers in the provision of affordable housing.
4. Continue to allow for the development of secondary residential units, as required by state law, while protecting the single-family character of neighborhoods.
5. Make an effort to preserve and increase the stock of rental housing, especially large rental units, as affordable to low and moderate income households.
6. Provide a jobs and housing relationship that satisfies local need for housing and affordability.
7. Work with the California Department of Housing and Community Development, Sonoma County, and its municipalities in establishing and coordinating low income housing for special groups such as farmworkers, seniors, the disabled, and the homeless.
8. Promote the issuance of Mortgage Revenue Bonds and Mortgage Credit Certificates to assist first-time home-buyers.
9. Establish programs with the Community Development Agency (Redevelopment Agency) to encourage the construction and/or rehabilitation of affordable units and utilize 20 percent set-aside tax increment funds.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. A summary of objectives is provided in Table E. Responsibility and time frames for each of the programs are shown in Appendix A.

1. Through corporate and police powers, the City will make every effort to meet its fair share of housing as determined by the State of California and regional planning agencies.
2. The City will regularly update the MEA and maintain a list of approved and proposed housing projects and make it available to the public.
3. The City will investigate and apply for appropriate governmental programs related to construction and rehabilitation needs of low and moderate income households. The City will apply for and/or make applications available to the public. Funding sources include, but are not limited to:

FEDERAL (FmHA)

- Community Development Block Grants (CDBG) - There are two major components: the non-entitlement grants for small cities and counties and entitlement loans and grants for large urban cities and counties. The Non-Entitlement program is state administered while the Entitlement Program is administered by HUD. The City currently participates in the small cities CDBG program.
- FmHA Section 502 - Rural Housing Home Improvement Loan Program. Provides loans to low income households to buy, build, improve, repair, or rehabilitate owner occupied rural homes.
- Section 504 - Rural Housing Repairs Program. Provides loans and grants to very low income persons to make repairs necessary for health and safety.
- Section 523 - Self-Help Housing. Provides grants and loans to fund technical assistance to groups building units financed under 502.
- Section 523/524 - Rural Housing Sites Loan Program. Provides direct loans to private or public non-profit organizations to acquire and develop land in rural areas.

STATE

- California Self Help Housing Program. Through grants and loans to local governments and non-profits, this program helps low and moderate income families construct or rehabilitate their homes.
- California Homeownership Assistant Program. Provides mortgage loans to eligible borrowers.
- Predevelopment Loan Program. Low interest loans to local governments and non-profits for predevelopment activities.
- Nonprofit Housing Program. The California Housing Finance Agency (CHFA) provides permanent financing for contractor-built single-family homes developed by nonprofit organizations which serve lower income families.
- Minority and Small Business Development. CHFA assists minority-owned and women-owned developers.

LOCAL

- Redevelopment Tax Increment Funds. State law requires that at least 20% of all property tax increments in a redevelopment area be set aside to subsidize new, existing, or rehabilitated low- and moderate-income housing. At least six percent of new or rehabilitated housing in a redevelopment project must be affordable to low-income households; another nine percent must be affordable to moderate income households. The City of Cloverdale established a Redevelopment Plan and Boundaries in 1987.
- 4. The City will continue to implement the provisions of the Second Dwelling Units Chapter of the City Municipal Code.
- 5. The City will keep a list of all available and appropriate federal, state, and local funding sources that support rental housing units. The City will apply for and/or provide applications to the public for the following programs:

FEDERAL (FmHA)

- Section 515 - Rural Rental Housing Program. Provides loans to construct and rehabilitate rental and cooperative housing for low and moderate income families and elderly persons.

STATE

- Rental Housing Construction Program. Provides loans to local governments for the development of rental housing.
- Rental Security Deposit Guarantee Demonstration Program (RDG). The purpose of the program is to assist homeless individuals and families to obtain permanent housing. The program provides landlords with rental deposit contractual guarantees for homeless households transitioning to permanent rental housing.
- Family Housing Demonstration Program. The purpose of the program is to develop new affordable rental or cooperative housing that provides onsite support services for low-income families.
- The City shall apply for Proposition 77 and 84 funds for rehabilitation and construction of rental units.

LOCAL

- Redevelopment Tax Increment Funds. State law requires that at least 20% of all property tax increments in a redevelopment area be set aside to subsidize new, existing, or rehabilitated low- and moderate-income housing. At least six percent of new or rehabilitated housing in a redevelopment project must be affordable to low-income households; another nine percent must be affordable to moderate income households. The City of Cloverdale established a Redevelopment Plan and Boundaries in 1987.
- 6. The City will monitor the demand for housing resulting from new employment opportunities during environmental review of projects. The City will encourage mixed-use development through its Zoning Ordinance.

7. The City will keep a list of all available state and regional programs that support housing for special needs groups. As appropriate, the City will apply for programs and/or provide applications to the public. In addition to programs identified under Implementation Program A5, the City shall work with HCD and apply for the following programs:
 - Emergency Shelter Program - Award grants to local governments and non-profits for actively aiding the homeless.
 - Senior Citizens Shared Housing Program - Provides grants to local governments and non-profits helping seniors find others with whom they can share housing.
 - Office of Migrant Services - Awards grants to local governments for administration, management, operation, and rehabilitation of rental housing units for migrant families.
 - Farmworker Housing Grant Program - The purpose of the program is to provide owner-occupied and rental units for low-income agricultural worker households. Funds can be used for land acquisition, site development, new construction and rehabilitation.
 - Farm Labor Housing Rehabilitation Loan Program. Provides loans to the owners of farm labor housing to bring it into compliance with the Employers Housing Act.
 - Housing Assistance Program - Provides Section 8 certificates to developmentally, mentally, and physically disabled adults.
8. The City, alone or in conjunction with the County, will investigate California Debt Limit Allocation Committee requirements for issuance of tax-exempt Mortgage Revenue Bonds (MRBs). If feasible, the City and/or County will apply to the Committee for allocation of MRBs.
9. The City will provide information to developers and the public regarding the California Housing Finance Agency's (CHFA) bond financing program.
10. The City, alone or in conjunction with the County, will contact the California Debt Advisory Commission and investigate requirements to obtain authority for the issuance of Mortgage Credit Certificates (MCCs). The City and/or County will work with local and real estate agencies and lenders to implement a MCC program.
11. The City will adopt an ordinance providing for priority processing for all residential developments providing greater than 10% of the units at affordable housing rates.
12. The City will adopt a "Growth Management Program" which encourages, as one of its rating criteria, the development of qualified affordable housing projects. Establish a rating system within a Growth Management Program that recognizes qualified affordable housing projects, or the level of affordability of a project, as one of the criteria for achieving a higher priority in the evaluation of any residential development.
13. The City will adopt an ordinance allowing for density bonuses on projects which (a) support employment in downtown area; or (b) use land defined as "blighted" or underutilized, or (c) propose a mixing of commercial and residential uses.

14. The City will adopt a policy strengthening Redevelopment Policy requiring that 15% of all residential development within Agency boundaries be geared to affordable housing stock. Develop an incentive program including the following items:
 - a. Assisted Rental Housing programs.
 - b. Existing owner-occupied housing-related programs.
 - c. Regular update of the CDA Capital Improvement Program.
 - d. Land Banking programs.
 - e. Equity sharing program assisting first-time home buyers and newly established job generators.
 - f. Provisions for in-lieu fees.
 - g. Other programs as determined by the Planning Commission and City Council.
15. The City shall adopt a policy encouraging industrial projects with greater than 100 employees to establish an equity sharing program or other housing assistance programs in a cooperative effort with the Community Development Agency.
16. Work with the CDA to establish funding programs identified throughout this document, especially the following:

LOCAL

- Redevelopment Tax Increment Funds. State law requires that at least 20% of all property tax increments in a redevelopment area be set aside to subsidize new, existing, or rehabilitated low- and moderate-income housing. At least six percent of new or rehabilitated housing in a redevelopment project must be affordable to low-income households; another nine percent must be affordable to moderate income households. The City of Cloverdale established a Redevelopment Plan and Boundaries in 1987.

GOAL B: TO PROVIDE ADEQUATE SITES FOR THE DEVELOPMENT OF ALL TYPES OF HOUSING.

Policies

1. Maintain an adequate supply of land in appropriate land use designations and zoning categories to accommodate projected household growth and to achieve residential vacancy rates allowing turnover with relative ease.
2. Provide information to the public and developers on approved and proposed projects that include rental housing.
3. Support the construction of affordable housing on adequate sites for all special needs groups.
4. Encourage the development of convalescent care facilities.
5. Ensure that infrastructure is improved and maintained to facilitate development of adequate sites.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. A summary of housing objectives is provided in Table E. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will prepare a vacant and underutilized land use map and inventory and regularly monitor vacant and underutilized lands.
2. Through the Zoning Code, the City will continue to allow limited residential units in commercial districts provided it can be done in a compatible manner.
3. The City will maintain a list that provides information on approved and proposed projects, especially projects which include rental housing. This list will be made available to the public.
4. The City will work in conjunction with the Community Development Agency to designate a housing coordinator. The coordinator will work with non-profit, County, and State agencies to develop a strategy for housing in Cloverdale. Tax-increment funds could be used in designating a person as part of the CDA. Responsibilities of the housing coordinator shall include, but are not limited to, developing a pilot program to package housing incentives and funding sources aimed at developing affordable housing, farmworker housing, emergency shelters, and other types of housing.
5. The City will amend the Zoning Code to allow convalescent care facilities in land use categories.
6. The City will review its Capital Improvement Program annually to ensure that sewer/water/street improvements facilitate timely residential development.

GOAL C: TO REMOVE GOVERNMENTAL CONSTRAINTS TO THE DEVELOPMENT OF HOUSING.

Policies

1. Update local ordinances according to state law including the Subdivision Ordinance, Zoning Code, and any others that may apply.
2. Allow using original materials and original methods as of date of construction in rehabilitation efforts, unless a health or safety hazard would occur, as consistent with state housing law.
3. Make every effort to facilitate permit processing related to residential improvement or development. Promote the expeditious processing and approval of residential projects that meet General Plan policies and City regulatory requirements.
4. Ensure that the City's policies, regulations, and procedures do not add unnecessarily to the costs of producing housing while assuring the attainment of other City objectives.

This shall include review of lot sizes, setbacks, architectural styles, alternate configurations, etc.

5. Grant residential density bonuses for projects that reserve units for very low and/or low income households, as required by state law.
6. Update the Zoning Code to allow manufactured homes including mobilehomes in single-family zones as required by state law.
7. Update the Zoning Code to allow mobilehome parks on all land planned and zoned for residential uses, as required by state law.
8. Ensure the Zoning Code allows for the provision of emergency and transitional shelters in Zoning Districts, as required by state law.
9. As a part of Implementation Program 4 above, review Zoning Code parking standards and consider re-evaluation on a case-by-case basis depending on the market to be served and the mix of 1, 2, and 3-bedroom units. Re-examine parking standards for senior housing.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. A summary of housing objectives is provided in Table E. Responsibility and time frames for each of the programs are shown in Appendix A.

1. Ensure the City's Subdivision Ordinance and Zoning Ordinance comply with the State laws requiring consistency with General Plan provisions.
2. The City building inspector will inspect rehabilitation plans and allow the use of original materials and methods of construction unless a health or safety hazard would occur, as consistent with state housing law.
3. The City will implement a fast-track application procedure for projects that including residential development, especially projects that include affordable housing.
4. If feasible, the City and applicant will participate in the Joint Venture for Affordable Housing, co-sponsored by the U.S. Department of Housing and Urban Development, the California Building Industry Association, and the California Department of Housing and Community Development to consider the reduction of development standards. The City will also consider amending the PUD ordinance to address varying design standards to promote affordable housing.
5. The City will amend the Zoning Code or create an implementing ordinance to grant residential density use bonuses or other incentives for very low and/or low income developments in order to comply with Government Code Sections 65913.4, 65915, and 65917.
6. In accordance with Section 65852.3 and 65852.4 of the Government Code, the City will revise its Zoning Code to allow manufactured homes in single-family zones. The manufactured home shall only be subject to the same development standards as a conventional single-family dwelling.

7. In accordance with Sections 65852.7 of the Government Code, "[a] mobilehome park, as defined in section 18214 of the Health and Safety Code, shall be deemed a permitted land use on all land planned and zoned for residential land use as designated by the applicable general plan; provided however, that a city, county, or a city and county may require a use permit. ."
8. In accordance with Section 65583(c)(1) of the Government Code, the City will ensure the Zoning Code provides for the possibility of emergency and transitional shelters.
9. Review Zoning Code parking standards for constraints to rental, senior, and other housing types.

GOAL D: TO ENCOURAGE THE MAINTENANCE AND PRESERVATION OF THE EXISTING HOUSING STOCK AND RESIDENTIAL NEIGHBORHOODS.

Policies

1. Encourage private reinvestment in older residential neighborhoods and private rehabilitation of housing.
2. Continue to use state and federal funding assistance to the fullest extent these subsidies exist to rehabilitate housing, and continue to give housing rehabilitation efforts high priority in the use of remaining Community Development Block Grant funds.
3. Support the revitalization of older neighborhoods by keeping streets, sidewalks, and other municipal systems in good repair.
4. Promote the continued upkeep of existing mobilehome parks.
5. Require abatement of unsafe structures, giving property owners ample opportunities to correct deficiencies.
6. Ensure that future CDBG loan agreements and other rehabilitation assistance agreements include clauses which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.
7. Conserve assisted rental housing units as affordable to very low, low, and moderate income families.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Please refer to Table

E for a summary of housing objectives. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will modify their fee structure to encourage private reinvestment of older residential neighborhoods and private rehabilitation of housing.
2. The City will make use of governmental programs listed in implementing Program 3 under Goal A of the Housing Element. In addition, the City will apply for and/or provide applications for the following programs as appropriate to the City's needs:

FEDERAL (FmHA)

- 533 - Rural Preservation Grant Program. Funds non-profit organizations to rehabilitate older rural homes for very low and low income families.

STATE

- Special User Housing Rehabilitation Program. Offers loans for rehabilitating residential, hotels, and other housing occupied by the elderly, disabled, and low income persons.
 - Deferred Payment Rehabilitation Loan Program. Provides loans to local governments to assist with the rehabilitation of housing for low and moderate income households.
3. The City will annually update its Capital Improvements Plan to ensure that municipal systems are in good repair. The City will make every effort to remove infrastructure constraints to the development of housing.
 4. The City will continue to enforce the provisions of the City Municipal Code and resolutions in order to maintain existing mobilehome parks.
 5. The City will comply with the Unreinforced Masonry Law, Government Code 8875 et. seq. requiring local agencies to identify and mitigate unsafe structures as it would apply to housing structures.
 6. The City will review all loan agreements for housing assistance to ensure clauses are included which require unit owners to retain the families that occupied the units prior to rehabilitation, unless adequate cause can be shown.
 7. The City will enact an ordinance requiring loan recipients to give one-year advance notice to the City of potential conversions to market rate units.
 8. Through an Inclusionary Housing Program, the City will assist non-profit housing corporations in managing or purchasing subsidy termination units¹.
 9. The City will consult with the Sonoma County Housing Authority to ascertain if there are available administration fee reserves.

¹Refer to Appendix C for an analysis of subsidy date termination and remaining loan repayment amount for the King's Valley Apartments, and the cost of replacing or preserving units.

10. The City will investigate the use of any future redevelopment funds and CDBG funds towards replacing and/or preserving the City's assisted rental housing stock.
11. The following programs will be managed by the Community Development Agency utilizing the 20 percent set-aside tax increment funds:
 - a. Assisted Rental Housing programs.
 - b. Existing owner-occupied housing-related programs.
 - c. Regular update of the CDA Capital Improvement Program.
 - d. Land Banking programs.
 - e. Provisions for in-lieu fees.
 - f. Equity sharing program assisting first-time home buyers and newly established job generators.
 - g. Other programs as determined by the Planning Commission and City Council.

GOAL E: TO PROMOTE EQUAL OPPORTUNITY TO SECURE SAFE, SANITARY, AND AFFORDABLE HOUSING FOR EVERYONE IN THE COMMUNITY REGARDLESS OF RACE, SEX, AND OTHER ARBITRARY FACTORS.

Policies

1. Promote the enforcement activities of the State Fair Employment and Housing Commission.
2. Give special attention in housing programs to the needs of special groups, including the disabled, large families, the elderly, and families with lower incomes.
3. Refer any equal housing opportunity complaints to the Sonoma County Rental Information and Mediation Service (SCRIMS).

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in it's implementation. Please refer to Table E for a summary of housing objectives. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will either provide, or support the Sonoma County Housing Authority in providing, educational services to the public and housing industry regarding their rights and responsibilities. Educational services shall include public service announcements in the local newspaper and the dissemination of brochures.
2. The City will refer any equal housing opportunity complaints to the Sonoma County Rental Information and Mediation Service.

GOAL F: TO ENCOURAGE ENERGY EFFICIENCY IN ALL NEW AND EXISTING HOUSING.

Policies

1. Promote the use of energy conservation features in the design of all new residential structures.
2. Promote the use of weatherization programs in existing housing.
3. Promote the design of all housing units for maximum benefit of sun and wind.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Please refer to Table E for a summary of housing objectives. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will promote higher density and infill developments that are consistent with General Plan goals and policies and that are located near major transportation corridors.
2. The City will continue to enforce existing state residential energy conservation standards.
3. The City will establish standards for energy efficient retrofits to be met prior to resale of homes.
4. The City will promote the use of weatherization programs for existing residential units. The City will consider participation in the following program:
 - California Energy Conservation Rehabilitation Program. The purpose of the program is to assist in energy conservation rehabilitation of owner and renter farmworker housing, residential hotels and rental housing occupied by the elderly or handicapped.
5. The City will establish standards for street widths, landscaping, and parking lots to reduce heat loss or provides shade.

TABLE E
HOUSING OBJECTIVES¹

Goal	Program	Objective	Comments
A	1	Very Low Income Low Income Moderate Income Above Moderate	227 d.u.'s 125 d.u.'s 172 d.u.'s 259 d.u.'s Regional share determined by ABAG.
A	3	Offer options to achieve 15% of new const./rehab. units as affordable to low and moderate income households.	Local Program-Tax increment redevelopment funds and, utilize other listed funding sources.
A	5	Encourages and offers options to achieve 10% of new construction as rental housing.	Utilize listed funding sources.
A	5,7	Maintain and improve existing homeless shelter; help families transition to permanent rental housing.	Utilize listed funding sources.
A	11	Provide an incentive for provision of greater than 10% affordable units.	Local Incentive Program
A	12	Encourages qualified affordable housing programs by enhancing their priority in the Growth Management Program.	Local Incentive Program
A	13	Provides options for achieving density bonuses while striving to support the downtown program and provision of affordable housing.	Local Incentive Program
A	14	Minimum of 20% of new construction set aside as affordable.	Local Incentive and Regulatory Program.
A	15	To enhance opportunities for moderate income, first-time home buyers.	Local Incentive Program.

Continued.

Source: ABAG Regional Housing Needs Determination, January 1989
City of Cloverdale Planning Department

Notes:

¹The table summarizes housing needs and outlines Cloverdale's quantified objectives for the period July 1, 1990 to July 1, 1995. The City will make a good faith effort toward attaining the objectives. These quantified objectives represent a reasonable expectation for the new housing units that will be developed and households that will be assisted between 1990 and 1995 based on the policies and programs outlined in this section and general market conditions. In 1990, the City has shown progress towards meeting the objectives through development of very low, low, and moderate income rental and owner units. Refer to the MEA, Appendix F for a list of adequate sites including sites which have been developed with affordable units in 1990.

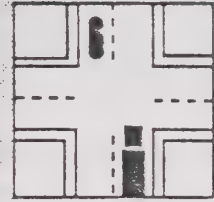
TABLE E (Continued)

HOUSING OBJECTIVES

Goal	Program	Objective	Comments
D	2	Rehabilitate the 16 % of the City's housing stock that is considered deteriorating or dilapidated.	Utilize listed funding sources.
D	6, 7, 8, 9, 10	Conserve 75 King's Valley Apartments potential subsidy termination units.	Conserve as affordable with identified sources of funds.

Source: ABAG Regional Housing Needs Determination, January 1989
City of Cloverdale Planning Department

CIRCULATION ELEMENT



INTRODUCTION

The Circulation Element consists of the general location of existing and proposed major thoroughfares, transportation routes, terminals, and other infrastructure all correlated with the land use element. Please refer to Exhibit 4. Several major findings were made in the General Plan Master Environmental Assessment (MEA) including minor improvements to existing traffic conditions and recommended circulation improvements are needed to improve traffic at General Plan build-out.

The Circulation Element has three major purposes: to state the guiding policies of the City with respect to transportation of people and goods within its planning area; to identify actions, such as street extensions and widening, which are necessary to ensure that the goals embodied in these guiding policies will be achieved; and to identify actions required for other infrastructure improvements such as to water, wastewater, stormdrain, utilities, and other systems.

GOALS, POLICIES AND IMPLEMENTATION PROGRAMS

GOAL A: DEVELOP AND MAINTAIN A BALANCED TRANSPORTATION SYSTEM.

Policies

1. Develop the Circulation Plan network of freeway/highways, arterials, collectors, and local streets. The proposed streets should be designed to serve the functions they are intended to serve.
2. Upgrade and maintain the existing circulation network to meet traffic safety standards.
3. Work with the County of Sonoma in addressing regional transportation issues.
4. Plan and reserve in advance of development, proposed highway, arterial, and collector street alignments in areas in which increased traffic will be generated. Development will be set back along the entire right-of-way (ROW) with sufficient width to accommodate anticipated future traffic requirements.
5. Design street systems in residential areas to discourage or prevent through traffic, to encourage internal movement by bicycling and walking, and to provide safer and quieter neighborhoods.
6. Consider appropriate site planning techniques in evaluating development proposals to minimize impacts to traffic flow and safety.

7. Require new developments and expansions of existing development to provide necessary street improvements for the demand they generate.
8. Ensure that the impact of recreational traffic on local residents is minimized.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibilities and time frames for each of the programs are shown in Appendix A.

1. The City will develop their circulation system according to the Circulation Plan and diagrams (Exhibit 4).
2. Through the Capital Improvement Plan and related impact fees, the City will ensure that adequate funds are provided to upgrade and maintain the existing circulation system.
3. The City will provide assistance to the County of Sonoma in the development and updating of the County Congestion Management Plan.
4. The City will adopt official plan lines for all designated arterials, and collector streets within the City of Cloverdale. The proposed major street system (designed to accommodate traffic at build-out of the General Plan) is shown on the Circulation Plan, Exhibit 4.
5. In new residential areas, the City will discourage through traffic by implementing local streets which are relatively short and discontinuous. Cul-de-sac streets and loop streets exemplify appropriate designs for local streets. The City will provide input through environmental and project review.
6. Through the environmental review process, the City will require proposed developments to include appropriate site planning techniques which minimize traffic impacts, and to provide the necessary street improvements. The site planning techniques shall consider building setbacks and provision of street frontage necessary for future street widening; driveway locations which minimize vehicular conflicts on main streets and major intersections; and onsite amenities which could reduce vehicle trips such as transit stops, bike racks and/or ancillary services.
7. The City will develop a comprehensive citywide street improvement fee for new development (buildout of the General Plan) to be used to finance General Plan roadway improvements.
8. The City will develop directional signing systems to help guide recreational traffic.
9. The City will prepare a Downtown traffic plan and an off-street parking plan. These plans can be implemented through assessment districts or other sources of funds.

GOAL B: MAINTAIN A SATISFACTORY LEVEL OF SERVICE FOR AUTO TRAFFIC.

Policy

1. The City will strive to maintain traffic conditions near the Level of Service (LOS) C/D threshold (corresponding to a level near 80 percent of theoretical capacity utilization) for signalized intersections and roadways and a Level of Service D for minor movements at unsignalized intersections. Exceptions to this standard will be allowed only where the City Council determines that improvements needed to maintain LOS C/D at specific locations are not feasible.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibilities and time frames for each of the programs are shown in Appendix A.

1. To facilitate maintenance of Level of Service C/D conditions, the City should adopt the functional street and highway improvements indicated in the Circulation Plan.
2. To maximize safety and traffic-carrying capacity, and to maintain the higher-speed bypass character of Foothill Boulevard, driveway intersections on this arterial will not be allowed. Street intersections shall be minimal, with optimum spacing between intersections.
3. To maximize capacity of major intersections, commercial driveways will be kept at a minimum number and located so as to prevent conflicts at intersections and with other driveways.

GOAL C: PROMOTE BICYCLE USE AND WALKING.

Policies

1. Provide bicycle lanes of sufficient width for bicycle travel on all major arterials in Cloverdale where the right-of-way is available.
2. Develop a citywide plan for integrating bicycle facilities with regional transit stops where right-of-way and funding exist.
3. Ensure all major new development contains provisions for safe, secure bicycle parking.
4. Construct sidewalks on all downtown city streets, particularly those providing access to the downtown area, commercial establishments, and transit stops.
5. Encourage pedestrian use in new developments through sidewalks and creative site design.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibilities and time frames for each of the programs are shown in Appendix A.

1. The City will develop a comprehensive bikeway plan. Criteria for bikeways outlined in the California Department of Transportation's publication *Planning and Design Criteria for Bikeways in California* shall be followed.
2. The City will correct deficiencies in, and expand the existing facilities and provide for the design of, safe, convenient and attractive bicycle and pedestrian facilities whenever possible.
3. Street crossings shall be designed to provide for the safety needs of bicyclists and pedestrians.
4. The City shall involve private development in providing bikeways and support facilities when such facilities pass through or abut a development site.
5. The City will repair and/or construct sidewalks on all residential, collector, and arterial streets.
6. The City will ensure that the Downtown Plan includes pedestrian amenities.

GOAL D: PROMOTE TRANSIT SERVICE AND USE

Policies

1. Increase existing bus transit services and work to develop new bus transit services.
2. Support efforts in developing new forms of public transit.
3. Promote ridesharing activities in the Cloverdale area.
4. Plan new residential and commercial development to fully accommodate, enhance, and facilitate public transit, including pedestrian and bicycle access to transit.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibilities and time frames for each of the programs are shown in Appendix A.

1. The City will encourage Sonoma County Transit to expand existing service to the City of Cloverdale and to develop new express service during commute hours.
2. The City will encourage the establishment of new bus routes to serve new residential areas.

3. The City will participate in efforts with the County of Sonoma to establish passenger rail service on the Northwestern Pacific Railroad right-of-way.
4. The City will reserve land in the vicinity of the existing Northwestern Pacific Railroad right-of-way for potential use as a station and park-and-ride lot for future commuter rail service.
5. The City will take an active role in publicizing rideshare options for residents commuting to points outside of the immediate vicinity.
6. The City will encourage Caltrans to plan and construct park-n-ride lots at the central and southern interchanges of the new U.S. 101 freeway bypass.
7. The City will develop and adopt a Transportation Systems Management (TSM) Ordinance covering existing and future large employers. This ordinance should have as a goal the reduction of daily trips as well as reduction in peak hour trips.

GOAL E: TO MAINTAIN AN ADEQUATE LEVEL OF SERVICE IN THE CITY'S INFRASTRUCTURE SYSTEMS TO MEET THE NEEDS OF EXISTING AND PROJECTED DEVELOPMENT.

Policies

1. Coordinate timing and location of water, wastewater, and storm water facilities with land development.
2. Investigate future sources of water for existing and future developments.
3. Utilize corporate powers to provide funds to meet water, wastewater, and storm water expansion and repair.
4. Manage and control water consumption by existing users to coincide with water availability.
5. Regulate commercial and industrial effluent to improve water quality.
6. Investigate possible spray irrigation sites to dispose of treated effluent.
7. Coordinate the location and undergrounding of private utilities (electric, telephone, cable, gas) to coincide with future City land use and capital improvement plans.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibilities and time frames for each of the programs are shown in Appendix A.

1. Through the Capital Improvement Plan, a growth phasing plan, and the environmental review process, the City will coordinate public utility provision with land development.

2. The City will use its corporate powers to collect funds for water, wastewater, and stormwater expansion and repair. Proposed system improvements are identified in the City's Water and Wastewater Master Plan and the improvements will be included within the Capital Improvements Plan.
3. The City will provide educational information on water conservation to Cloverdale citizens and businesses.
4. The City will prepare a water rationing plan to be used in case acute water shortages occur.
5. The City will review all Use Permits and other discretionary permits for any excessive water use above quotas.
6. The City and the Regional Water Quality Control Board will monitor commercial and industrial effluent, and issue warnings or consider fines for excessive water degradation. The City will work with the RWQCB regarding wet-weather and dry-weather discharges. The City will ensure that an adequate amount of wastewater connections are available for residential and non-residential uses.
7. The City will investigate and secure tenure on effluent spray irrigation sites including, but not limited to, the following:
 - Property designated as Destination Commercial (includes golf course)
 - Airport
8. Through the environmental review process, the City will notify private utilities (electric, telephone, cable, gas) of development projects which will require their services.
9. The City will notify private utilities of the City's Capital Improvement Plan to coordinate the location and undergrounding of private utilities.

NOISE ELEMENT



INTRODUCTION

The purpose of the Noise Element is to identify and appraise noise problems in the community. The Noise Element analyzes and quantifies, to the extent practical, current and projected noise levels for all sources of significance. Please refer to Exhibit 8 and 9 and Appendix D for additional information on noise levels. Several major findings were made in the General Plan Master Environmental Assessment (MEA) including: Highway 101/Cloverdale Boulevard and the Northwestern Pacific Railroad are major noise contributors in Cloverdale; there is some degree of land use conflict associated with excessive noise levels along Highway 101/Cloverdale Boulevard corridor; and the 60 CNEL contour defines the Noise Referral Zone.

GOALS, POLICIES, AND IMPLEMENTATION PROGRAMS

GOAL A: TO PROTECT PUBLIC HEALTH AND WELFARE BY ELIMINATING EXISTING NOISE PROBLEMS AND BY PREVENTING SIGNIFICANT DEGRADATION OF THE FUTURE ACOUSTIC ENVIRONMENT.

Policies

1. Incorporate noise considerations into land use planning decisions.
2. Establish acceptable limits of noise for various land uses throughout the community. The City adopts the noise standards presented in Exhibit 16 of Appendix D which identify interior and exterior noise standards in relation to specific land uses, particularly residential areas, schools, hospitals, open space preserves, and parks. The standards specify the maximum noise levels allowable for new developments and impacted by transportation noise sources operating on public or quasi-public property. (Sources on private property would be subject to the noise ordinance requirements as called out in Policy 3).
3. Establish a new Community Noise Ordinance to mitigate noise conflicts between adjacent land uses. The Noise Ordinance establishes noise limits that cannot be exceeded at the property line. The Noise Ordinance because it is a City statute can only control noise generated on private property. Therefore, the primary function of the Noise Ordinance is to control stationary noise sources and construction noise.
4. Require a noise impact evaluation for all projects as part of the design review process to determine if unacceptable noise levels will be created or experienced. Should noise abatement be necessary, the City shall require the implementation of mitigation measures based on a detailed technical study prepared by a qualified acoustical engineer

- (i.e., a Registered Professional Engineer in the State of California with a minimum of three years experience in acoustics).
5. Discourage projects that do not comply with the adopted standards.
 6. Consider establishing a periodic noise monitoring program to identify progress in achieving noise abatement objectives and to perform necessary updating of the noise element and community noise standards. The California Department of Health Services recommends that noise elements be updated every 5 years.
 7. Minimize potential transportation noise through proper design of street circulation, coordination of routing, and other traffic control measures.
 8. Require the inclusion of noise mitigation measures in the design of new roadway projects in Cloverdale. This would include but not be limited to the Southwest and Southeast Bypass roads currently under consideration.
 9. Require the construction of barriers to mitigate sound emissions where necessary or where feasible.
 10. Evaluate noise generated by construction activities, and subject them to the requirements of the Noise Ordinance.
 11. Ensure the effective enforcement of City, State and Federal noise levels by all appropriate City divisions. The City shall provide quick response to complaints and rapid abatement of noise nuisances with the scope of the City's police powers.
 12. Actively advocate motor vehicle noise control requirements for production and sale.
 13. Establish noise guidelines for City purchasing policy to take advantage of federal regulations and labeling requirements.
 14. Coordinate with the California Occupational Safety and Health Administration (Cal-OSHA) to provide information on and enforcement of occupational noise requirements within the City.

Implementation Programs

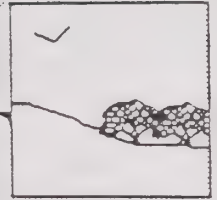
The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will establish standards that specify acceptable limits of noise for various land uses throughout the City. These criteria are designed to fully integrate noise considerations into land use planning to prevent new noise/land use conflicts. Exhibit 15 of Appendix D shows criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the bases for the development of specific Noise Standards. These standards, presented in Exhibit 16 of Appendix D, define the City policies related to land uses and acceptable noise levels. These tables are the primary tools which allow the City to ensure noise integrated planning for compatibility between land uses and outdoor noise.

2. The City will incorporate noise reduction features during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses. The noise referral zones identified in Exhibits 10 and 12 of Appendix D (areas exposed to noise levels of at least 60 CNEL) can be used to identify locations of potential conflict. New developments will be permitted only if appropriate mitigation measures are included such that the standards contained in this Element or adopted ordinance are met.
3. The City will amend and adopt a new comprehensive community noise ordinance to ensure that City residents are not exposed to excessive noise levels from existing and new stationary noise sources. A proposed Noise Ordinance is contained in Appendix D. The purpose of the ordinance is to protect people from non-transportation related noise sources such as music, machinery and pumps, air conditioners and truck traffic on private property. The Noise Ordinance does not apply to motor vehicle noise on public streets, but it does apply to vehicles on private property. The Noise Ordinance is designed to protect quiet residential areas from stationary noise sources. The noise levels encouraged by the ordinance are typical of a quiet residential area.
4. The City will enforce the new community Noise Ordinance. The most effective method to control community noise impacts from non-transportation noise sources is through application of the community noise ordinance.
5. The City will require that new commercial projects, proposed for development near existing residential land use, demonstrate compliance with the City Noise Ordinance prior to approval of the project.
6. The City will ensure all new residential projects are constructed near existing sources of non-transportation noise (including but not limited to commercial facilities, public parks with sports activities) must demonstrate via an acoustical study conducted by a Registered Engineer that the indoor noise levels will be consistent with the limits contained in the noise ordinance.
7. The City will enforce the State of California Uniform Building Code that specifies that the indoor noise levels for residential living spaces not exceed 45 dB LDN/CNEL due to the combined effect of all noise sources. The State requires implementation of this standard when the outdoor noise levels exceed 60 dBA LDN/CNEL. The Noise Referral Zones (60 CNEL) can be used to determine when this standard needs to be addressed. The Uniform Building Code (specifically, the California Administrative Code, Title 24, Part 6, Division T25, Chapter 1, Subchapter 1, Article 4, Sections T25-28) requires the "Interior community noise levels (CNEL/LDN) with windows closed, attributable to exterior sources shall not exceed an annual CNEL or LDN of 45 dB in any habitable room." The code requires that this standard be applied to all new hotels, motels, apartment houses and dwellings other than detached single-family dwellings. The City can and is encouraged to reduce the noise standard from 45 CNEL to 40 CNEL. Additionally, the standard should be applied to single-family homes.
8. The City will encourage the use of walls and berms in the design of residential or other noise sensitive land uses that are adjacent to major roads, commercial, or industrial areas.
9. The City will provide for continued evaluation of truck movements and routes in the City to provide effective separation from residential or other noise sensitive land uses.

10. The City will encourage the enforcement of State Motor Vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Cloverdale Police Department.
11. The City will require construction activity to comply with limits established in the City Noise Ordinance.
12. The City will designate one agency in the City to act as the noise control coordinator. This will ensure the continued operation of noise enforcement efforts of the City. The agency shall ensure that ordinances, etc., are implemented as well as ensuring the periodic noise monitoring program is established.

CONSERVATION AND OPEN SPACE ELEMENT



INTRODUCTION

The Conservation and Open Space Element is concerned with the conservation of open space and the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, fisheries, wildlife, and minerals. The General Plan Master Environmental Assessment made several findings related to this subject. These include the following: the Russian River corridor is an important biotic feature; the study area contains sensitive wetland and riparian habitats; the wooded tributary corridors that feed the Russian River from the west represent a biological sensitive habitat; the hillsides support extensive oak woodland composed of several species of oak trees; sand and gravel are the important mineral resources in the study area; the ridgelines of the western hillsides represent a valuable aesthetics feature; and, less than 20 percent of the study area has been subjected to systematic inspection for cultural resources.

GOALS, POLICIES, AND IMPLEMENTATION PROGRAM

GOAL A: TO CONTROL DEVELOPMENT IN HILLSIDE AREAS IN ORDER TO PRESERVE THEIR AESTHETIC QUALITIES AND PROTECT SENSITIVE AREAS FROM DEGRADATION.

Policies

1. Rely on existing and man-made features to give shape and form to Cloverdale. To this end, new development shall not breach the Study Area boundary, except as may be required for the establishment or expansion of public facilities.
2. Encourage the use of native and drought-tolerant plant species in landscaping and in the replanting of cut slopes.
3. Allow development only in a manner that protects important, visually prominent ridgelines and landmarks and scenic hillsides above 400' in elevation. To determine whether a ridgeline is considered prominent, the following criteria shall be applied:
 - A. Ensuring that hillside development is related to the "view from the valley", particularly from a scenic roadway.
 - B. The ridgeline is shown on Exhibit 7 of the Open Space and Conservation Element as constituting a prominent ridgeline.
 - C. The ridgeline or hillside is visible from the valley floor for more than one thousand (1000) continual linear feet as seen from a major roadway listed in Program #5 below.
4. During any construction, keep grading to a minimum and create a balance between cut and fill.

5. Maintain significant views of prominent ridgelines from public rights of way and other public open spaces, especially major highways. Proposed structures shall not obscure major ridgelines when viewed from City designated roadways.
6. Design streets so as to maintain the aesthetic quality and geologic integrity of the hillside.
7. Where possible, encourage development to be clustered so as to minimize visual impacts on hillsides. Minimize alteration of drainage patterns and vegetation of land characterized by slopes of ten percent or more.
8. Encourage areas in the incorporated City limits and areas of lower elevation in the Sphere of Influence and Study Area to develop first prior to allowing development in the hillsides.
9. Protection of distinctive natural vegetation such as oak woodlands, riparian corridors and mixed evergreen forests shall be encouraged.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will subject all proposed hillside developments to design review. The City will develop Hillside Development Guidelines (HDG). All hillside development prior to the adoption of the HDG by the City Council will require "approval in concept" by the Planning Commission or City Council before applications are accepted. The concept approval shall require submission of a model or 3-dimensional exhibit showing the extent of all development related to existing conditions.

The City shall use the following factors in determining the suitability of a hillside or ridgeline for development in their review process:

- A. Consistency with Hillside Development Guidelines (HDG).
- B. Level of disturbance to natural terrain associated with grading activities or vegetation removal.
- C. Whenever possible, avoid the grading of slopes > 20% and work in a sensitive manner with construction of access routes.
- D. Visibility of site from valley floor and public viewing points, particularly major roadways.
- E. Level of disturbance to natural landmarks or visually prominent ridgelines or hillsides, both on and off-site.
- F. Impact upon public services.

2. The City will encourage the protection of the natural landforms and vegetation of the hills (above 400') as much as possible, particularly along ridgelines and in areas characterized by steep slopes. The City will ensure that hillside developments consider the following in the HDG and all future reviews:
 - A. Minimize Perception of Bulk
 - Minimize changes to natural topography
 - Follow hillside contours
 - Use materials and colors to reduce bulk
 - Minimize building height
 - Design structure to fit with existing neighborhood
 - Use architectural features to break up massing
 - Avoid long single-ridge rooflines
 - Use terraced roof and building lines
 - B. Integrate Structures with Environment
 - Use natural materials and colors
 - Integrate with environmental texture and forms
 - Use existing landscaping to blend structure with environment
 - Integrate all structures on a single site
 - Blend roof and parking surfaces with environment
 - Integrate fences and walls with structures and setting
 - C. Avoid Interference with Privacy
 - Control view to adjacent properties
 - Locate buildings to minimize privacy impact
 - Use landscaping to enhance privacy
 - Reduce noise impacts on adjacent dwellings
 - Control exterior light and glare sources
 - D. Preserve Views and Access To Views
 - Ensure that hillside development is related to the "view from the valley", particularly from a scenic roadway.
 - Encourage compact development is screened by trees or other natural features.
 - Relate building design, color, height and placement to terrain and natural features.
 - Maintain ridgelines and views of natural landmarks such as the Russian River, Red Mountain, Pine Mountain, or western slopes.
3. The City will develop a list of acceptable native and drought-tolerant species for landscaping and replanting of cut slopes on hillside properties. The City will regulate street trees in hillsides to avoid a uniform "subdivision" appearance.
4. The City will ensure that major scenic ridgelines and highly visible hillsides are protected from visually obtrusive development. To this end, a visibility analysis shall be required for the creation of subdivisions and other projects located on prominent ridgelines or hillsides as defined in Policy #3 above. (See Exhibit 7)

Only developments that are shown to be unobtrusive as viewed from scenic roadways and based on this analysis may be approved. Proposed structures shall not obscure the major ridgelines when viewed from the City designated roadways.

5. The viewshed along scenic highways and streets will be primarily used to evaluate and determine the level of visual impact that a hillside development might cause. The following road segments are declared scenic roads for the purposes of the Cloverdale General Plan and City land use regulations:

- State Highway 101 Bypass--entire length of planning area.
- Cloverdale Boulevard--entire length of planning area.
- Foothill Blvd.--entire length (when constructed) within planning area.
- Cherry Creek Road--west of Foothill Boulevard.
- Hot Springs Road--west of Foothill Boulevard.
- First Street--west of Foothill Boulevard.
- Healdsburg Avenue--west of Franklin Avenue (future alignment).

City scenic road and street efforts will be coordinated with the County's scenic highway program.

6. To minimize changes to natural topography, hillside development will consider the following:
- Merge building into the hillside (terrace building floor levels)
 - Balance cut and fill
 - Use underground spaces to reduce bulk
 - Screen foundations and undersides of structures
 - Discourage pads and terracing of home sites
7. The City will approve roads serving hillside development that follow natural contours. Curbside parking will be minimized or prohibited. Slow speeds will be encouraged. The City will review and update hillside road standards.
8. The City will revise its Planned Unit Development Ordinance to further encourage creative design and clustering of developments in hillside areas in accordance with the densities prescribed in the Land Use Plan.
9. The City will ensure that developments (i.e., vineyards, residential lots, etc.) does not encroach into river and creek buffers. The 50-foot setback areas (on each side, for a total 100-foot buffer) are shown on the Conservation and Open Space Element Map.
10. Project applicants will be required to submit detailed environmental information including topography, preliminary grading and drainage plans, road and building plans, and tree and vegetation preservation/removal plans.
11. Through the environmental review process, the City will analyze areas of ecological sensitivity in relation to the proposed development.
12. The City will implement a growth phasing plan for the Study Area as outlined in the Land Use Element that encourages those areas within the City limits and at lower elevations in the Sphere of Influence and Study Area to be developed first, prior to allowing development in hillside areas.

GOAL B: TO PRESERVE AND ENHANCE CLOVERDALE'S NATURAL ENVIRONMENT.

Policies

1. The City shall encourage the retention of large or otherwise significant trees both in residential and open space areas.
2. The City shall establish long-term conservation zones. The City it will explore the possibility of using incentives and credits to create easements and open space.
3. The City shall encourage the use of native trees, shrubs, and ground covers for use in public and private landscaping.
4. The City shall promote agricultural uses in designated "conservation" areas where it is a current use (refer to Exhibit 3).
5. The City shall make every effort to conserve and protect the area's natural vegetation and wildlife.
6. Encourage the County to retain surrounding lands in very low density residential, agricultural, open space, and natural resource uses that provide contrast to urbanized Cloverdale. Promote the creation of a community separator or open space buffer between Cloverdale (the Sphere of Influence) and Asti.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will develop a recommended plant list for use in Cloverdale and make available information on the many regionally indigenous species and on drought tolerant landscaping in general.
2. The City will consider density shifts and/or public land trades to obtain the necessary easements for riparian and creek zones.
3. The City will implement a tree conservation ordinance to both preserve and protect the area's existing trees and also guide future landscaping and restoration. The ordinance shall provide for the replacement of all trees removed that are deemed significant (e.g. oaks greater than 10-inches in diameter at breast height (DBH) or conifers greater than 15 inches DBH).
4. Through the General Plan and Zoning Code, the City will promote existing agricultural uses in designated "conservation" zones.
5. The City will continue to require site-specific surveys to determine biological sensitivities and assess potential resource impacts by project. Potentially sensitive features in this region could include clay soils (vernal pools), serpentine or rhyolite-

derived soils (rare chaparral), seeps, springs and other wetlands, native grassland and meadow, and old growth woodland or forest.

6. Because of the possibilities for sensitive species and/or wetlands in the Cloverdale area, all projects that involve natural vegetation will provide documentation of existing site conditions suitable for submittal to either the California Department of Fish and Game or the U. S. Army Corps of Engineers for regulatory review.

GOAL C: PROTECT AND ENHANCE THE NATURAL BEAUTY, HABITAT, AND BIOTIC PRODUCTIVITY OF THE RUSSIAN RIVER.

Policies

1. Give consideration to dedicating a portion of the lands adjacent to the Russian River to restore native grassland habitat for raptors.
2. Encourage restoration of degraded riparian habitats where feasible.
3. Encourage the retention of existing riparian vegetation within the conservation buffers along all natural watercourses.
4. Discourage agricultural activities within the conservation buffers along all natural watercourses.
5. Ensure that drainage and runoff from City sources is not impairing the water quality of the Russian River.
6. Seek to avoid the contamination of groundwater supplies.
7. Encourage the restoration of fisheries through habitat improvement and resource management.
8. Discourage the encroachment of sand and gravel operations into the study area.
9. Explore the possibility of establishing a natural wetland treatment phase when expanding wastewater treatment facilities.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and timeframes for each of the programs are shown in Appendix A.

1. The City in conjunction with County, State, and Federal agencies will cooperate with the Coastal Conservancy in preparing a Russian River riparian corridor restoration and management plan. The management plan will address issues to determine uses/restrictions of the terrace land adjacent to the river, such as maintaining existing riparian habitat, preservation of fisheries, and preserving and monitoring water quality. It will also address recreation opportunities.

2. The City will encourage restoration of degraded riparian habitat as part of all development that borders rivers and creeks in their natural state.
3. The City will implement as part of the Zoning Code a requirement that all river and creek buffers identified in the Conservation and Open Space Element Map be retained as riparian habitat if they currently exist or left open as non-agricultural open space. Riparian Habitat in channels deemed needing improvements in the adopted City Roadway and Master Drainage Plans will be mitigated through retention of habitat and large trees where feasible, replacement, biological solutions for bank stability or erosion control, or other measures determined appropriate by the Department of Fish and Game and other agencies.
4. The City will monitor known toxic sites and require new projects to document that they do not contribute to contamination of groundwater. Periodic testing of runoff and groundwater water quality should be done to determine the effectiveness of these measures.
5. The City will cooperate with the County as they update their Aggregate Resource Management (ARM) Plan. All future sand and gravel uses or expansion of existing uses within the Russian River corridor will be addressed and regulated.
6. The City will consider the use of a natural wetland treatment phase when preparing studies to expand wastewater treatment facilities.

GOAL D: TO IDENTIFY, PRESERVE, AND ENHANCE THE HISTORIC AND PREHISTORIC CULTURAL RESOURCES OF CLOVERDALE.

Policies

1. Attempt to preserve remaining prehistoric camps, villages, and use sites.
2. Attempt to identify areas that may be used by the Pomo Indians for resource procurement or religious purposes.
3. Make an effort to identify historically significant structures, i.e. those with any of the following attributes: representative of a unique style of architecture, typical of a type of architecture considered significant either locally or throughout the state (such as the Victorians of San Francisco), or a structure associated with either an important local or wider-known individual or event important locally or throughout the region.
4. Make an effort to identify historic materials such as structural remains, evidence of past economic activity, filled in cellars, and foundation remains.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. Prior to ground disturbance, the City may require potential developers to investigate the presence of archaeological artifacts. This shall include agricultural conversion.
2. The City will consider contacting the Native American Heritage Commission along with local tribal members to determine if the study area contains any areas of resource procurement or areas used for religious purposes. This should be done for the entire study area, and not on a project by project basis.
3. The City will assist property owners in their restoration efforts. This includes providing information on preservation resources and assisting in the placement of structures on the National Register of Historic Places.
4. The City will regulate changes in the exteriors of structures identified in the California Archaeological Inventory at Sonoma State University as well as any future historic assessments. This can be accomplished through design review to enhance the value of Cloverdale's heritage.
5. The City will seek private and public funding for historic preservation.
6. The State Historic Building Code will be used at the Building's Official's discretion on any structure identified in the local or State Historic Properties listing or the National Register of Historic Places and in the California Archaeological Inventory as well as any future historic assessments.
7. As part of a study of historic resources, the City will conduct an inquiry into what Cloverdale citizens consider locally important historic examples of architecture and to identify structures which should be added to a locally generated list. This has been done in part with the Downtown Specific Plan
8. The City will consider employing the service of an historical archaeologist to assist in the development of maps showing the locations of structures and activities which have occurred in the area since its original settlement. This research would lead to the development of a sensitivity map which would determine which areas should be further inspected for buried or obscured resources as a part of the environmental process.

PUBLIC HEALTH AND SAFETY ELEMENT



INTRODUCTION

The Public Health and Safety Element addresses the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, and dam failure; slope instability leading to mudslides and landslides; subsidence and other geologic hazards in an area; flooding; and wildland and urban fires. The Public Health and Safety Element shall include mapping of known seismic and other geologic hazards. Seismic, geologic, and fire severity (CDF Fire Severity Zones) mapping has been accomplished in the MEA. It shall also address evacuation routes, peakload water supply requirements, and minimum road widths and clearance around structures, as those items relate to identified fire and geologic hazards.

Several major findings were made in the General Plan Master Environmental Assessment (MEA) and Issues paper including: the majority of the City is classified as a high to medium fire hazard risk; the City is at risk for liquefaction; slopes above the 400 foot elevation may be at risk of landslides; and numerous public buildings in the City's historical area are subject to unreinforced masonry laws.

INCORPORATION OF COUNTY SEISMIC SAFETY ELEMENT

The City of Cloverdale's General Plan incorporates by reference the Public Safety Element of the County of Sonoma. The Public Safety Element was adopted by the Board of Supervisors on March 23, 1989. The City will adopt appropriate policies and programs that pertain to the General Plan Study Area. Provided below are County of Sonoma goals and policies as well as goals and policies that are City-proposed for the General Plan.

GOALS, POLICIES, AND IMPLEMENTATION PROGRAMS

COUNTY OF SONOMA

GOAL A: PREVENT UNNECESSARY EXPOSURE OF PEOPLE AND PROPERTY TO RISKS OF DAMAGE OR INJURY FROM EARTHQUAKES, LANDSLIDES AND OTHER GEOLOGIC HAZARDS.

Policies

1. Continue to utilize all available data on geologic hazards and related risks from the appropriate agencies.
2. Continue to utilize studies of geologic hazards prepared during the development review process.

3. Encourage research on geologic hazards, their probabilities and their effects within Sonoma County.
4. Require and review geologic reports prior to decisions on any project which would subject property or persons to significant risks from the geologic hazards shown on Figures PS-1a through PS-1i (pages 331 through 347) and related file maps and source documents. Geologic reports shall describe the hazards and include mitigation measures to reduce risks to acceptable levels. Where appropriate, require an engineer's or geologist's certification that risks have been mitigated to an acceptable level and, if indicated, obtain indemnification or insurance from the engineer, geologist, or developer to minimize County exposure to liability.
5. Adopt, upon approval by the International Congress of Building Officials and the State of California, revisions to the Uniform Building Code which increase resistance of structures to groundshaking and other geologic hazards.
6. Require dynamic analysis of structural response to earthquake forces prior to County approval of building permits for structures whose irregularity or other factors prevent reasonable load determination and distribution by static analysis.
7. Encourage strong enforcement of state seismic safety requirements for design and construction of dams, powerplants, hospitals and schools.
8. Roads, public facilities and other County projects should incorporate measures to mitigate identified geologic hazards to acceptable levels.

GOAL B: PREVENT UNNECESSARY EXPOSURE OF PEOPLE AND PROPERTY TO RISKS OF DAMAGE OR INJURY FROM FLOODING.

Policies

1. Coordinate flood hazard analysis and management activities with the Army Corps of Engineers, Federal Emergency Management Agency (FEMA) and other responsible agencies. Request changes in FEMA maps where appropriate to reflect new data or analyses.
2. Base land use planning and development review on FEMA maps and data or parcel specific scaled interpretations of these maps and site specific elevation data.
3. Prepare a comprehensive analysis of the potential flood hazards and drainage impacts associated with adopted land use plans for each major watershed in the City. Encourage the County to work with Cloverdale to develop basin wide drainage studies and development fees for the purpose of identifying and mitigating the direct and cumulative impact of flooding which results from the loss of permeable surfaces. The City shall use proposed annexations, redevelopment agreements, revenue sharing agreements and the CEQA process as tools to ensure that incorporated development pays its fair share toward the studies and mitigation of downstream flooding impacts caused by upstream development.

Pending completion of the above applicable drainage analyses, individual project applications shall be required to analyze and mitigate drainage impacts, based upon the

land use plan, as determined by the Water Agency. If such analysis identified unmitigated and cumulative significant effects, including impact on downstream flooding, further environmental documentation may be required.

If the event that the Water Agency determines that the project, when considered cumulatively with other projects to be undertaken in the drainage basin, will result in a significant effect with respect to downstream flooding, the project applicant will either a) prepare a supplemental environmental impact report on such effect, or b) agree to modify the project to construct improvements or participate in a funding mechanism necessary to mitigate any downstream flooding impacts (such as posting a bond on funds prior to recordation of the final map in an amount to be determined by the Water Agency). Failure to modify the project or to propose further environmental documentation shall be grounds for finding the project inconsistent with the plan.

4. Use the 100-year flood event and corresponding elevations as the County measure of acceptable level of risk and protection in the consideration of any amendments of the land use plan map.
5. Onsite and offsite flood related hazards shall be reviewed for all projects located within areas subject to known flood hazards.
6. Regulate development, water diversion, vegetation removal, grading and fills to minimize any increase in flooding and related damage to people and property.
7. Payment of costs for drainage facilities to handle the surface runoff from new development shall be the responsibility of developers and others who benefit.
8. Require that design and construction of drainage facilities be subject to the review and approval of the Sonoma County Water Agency (SCWA).
9. Require that tentative and final subdivision maps and approved site plans show areas subject to flooding as shown on the FEMA maps.
10. Give priority to floodplain management over flood control structures for preventing damage from flooding except where the intensity of development requires a high level of protection and justifies the costs of structural measures.
11. Consider the potential risk of damage from flooding in the design and review of projects, including those which could facilitate floodplain development.
12. Continue to enforce county code requirements on construction in flood hazard areas and other adopted regulations which implement the National Flood Insurance Program.
13. Avoid variances to building setbacks along streams and in 100-year flood plains without the review and approval of the Sonoma County Water Agency.
14. Limit filling in areas which could retain a significant amount of floodwater.
15. Encourage the timely completion and filing of inundation maps for all dams whose failure could cause loss of life or personal injury within Sonoma County.

GOAL C: PREVENT UNNECESSARY EXPOSURE OF PEOPLE AND PROPERTY TO RISKS OF DAMAGE OR INJURY FROM WILDLAND AND STRUCTURAL FIRES.

Policies

1. Continue to utilize available information on wildland and structural fire hazards.
2. Consider the severity of natural fire hazards, potential damage from wildland and structural fires, adequacy of fire protection and mitigation measures consistent with this element in the review of projects.
3. Require on-site detection and suppression, including automatic sprinkler systems, where available services do not provide acceptable levels of protection.

GOAL D: WHILE MAINTAINING THE AUTONOMY GRANTED TO IT PURSUANT TO STATE ZONING LAWS, IMPLEMENT STATE AND COUNTY REQUIREMENTS FOR THE STORAGE, TRANSPORT, DISPOSAL AND USE OF HAZARDOUS MATERIALS, INCLUDING REQUIREMENTS FOR MANAGEMENT PLANS, SECURITY PRECAUTIONS, AND CONTINGENCY PLANS.

Policy

1. Where allowed by law, regulate the transportation of hazardous materials to minimize the potential for damage. Seek regulation by other agencies consistent with adopted County policies.

CITY OF CLOVERDALE

GOAL E: REDUCE DAMAGE TO LIFE AND PROPERTY FROM NATURAL HAZARDS TO THE GREATEST EXTENT POSSIBLE.

Policies

1. Support the adoption of the County Safety Element into City Ordinance (policy) as incorporated by reference above.
2. Adopt revisions to the Uniform Fire and Building Codes which address fire and life safety after they are approved by inspection organizations and the State of California.
3. Ensure that roadways are adequate in terms of width, radius, and grade to facilitate access by emergency vehicles.
4. Develop and implement City programs for fuel breaks, brush management, controlled burning, revegetation and construction and maintenance of fire roads.

5. Incorporate and expand upon the fire safety standards recommended in CDF's "Fire Safety Guidelines" into City development standards and the Uniform Fire Code.
6. Require that fire/police facilities and equipment are adequate for proposed development before granting approval.
7. Require all new development in areas of potential fire hazards to provide for clearance around structures, the use of fire resistant ground cover materials, and require installation of automatic fire sprinklers systems.
8. Prepare and implement a Police/Fire Department Master Needs Assessment.
9. Ensure that increased septic and well activity do not increase ground water contamination.
10. Ensure that seismically unsafe buildings and structures including unreinforced masonry buildings (URMs) do not cause a serious threat to human safety and/or the ability of the Police and Fire Department to delivery service from a URM building.
11. In conjunction with the County, study the risk of seismically-induced liquefaction.
12. Require development adjacent to hillside areas to minimize geologic and fire hazards. Require all new development, including single-family residential to provide built-in fire protection (i.e. automatic fire sprinklers).

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City of Cloverdale will work with the County of Sonoma to implement all policies incorporated by reference in the Safety Element through the environmental review process and/or joint special studies between the County and the City of Cloverdale.
2. The City will review and revise the Uniform Fire and Building Codes as appropriate. The City will incorporate and expand upon CDF and County of Sonoma fire safety standards in (i.e. development codes and the Uniform Fire Code.
3. The City will require improvements to ensure emergency vehicle access as a condition of approval of proposed development.
4. The City Fire Department will ensure fire protection is adequate before approving proposed development. This shall be done through the environmental review/application review process.
5. To improve fire protection to the Study Area the City will require that:
 - All new homes should have a minimum fire flow of 1,000 gallons per minute available, plus additional storage appropriate to the size of the area served.

- All projects should include adequate road widths, gradients, cul-de-sac diameters, hydrants, and street lighting to facilitate emergency services protection to the Fire Department.
 - Traffic signals should be provided with emergency vehicle preemption devices. For each signalized intersection, a transmitter should be provided to the Fire Department.
 - Wildland urban interface dwellings should have residential sprinkler protection and Class A roofs and a vegetation management plan including required clearance around structures.
 - Project sponsors either; 1) donate land and construct a fire station or, 2) financially contribute to the cost of a "Master Police/Fire Department Needs Assessment" and participate in any assigned proportional costs for the expansion of the City Public Safety services. Note: The Needs Assessment will examine and address the future operating and spatial needs of the City Fire and Police Departments.
6. The City will initiate a study of fire hydrant location and water pressure. A hydrant maintenance plan will be coordinated with the City Public Works Department.
7. To improve police protection services, the City will require that:
- Project sponsors provide adequate street lighting and lighted house numbers.
 - Project sponsors comply with the "Standard Residential Building Security Recommendations" as directed by the City Police Department.
 - Developers either, 1) donate land and construct a fire station or, 2) financially contribute to the cost of a "Master Police/Fire Department Needs Assessment" and participate in any assigned proportional costs for the expansion of the City Public Safety services. The Needs Assessment will examine and address the future operating and spacial needs of the City Fire and Police Departments.
8. The City will investigate the relocation of the police and fire departments as recommended in the Downtown Specific Plan.
9. The City will coordinate with the County to extend the joint fire protection agreement.
10. The City will require studies from project developers to ensure that major new development does not adversely affect groundwater quality.
11. The City will implement a mitigation program for all identified URM buildings in accordance with State law.
12. The City and County, through preparation of a study, will determine the location and extent of soil deposits that are susceptible to liquefaction.
13. For projects proposed in hazardous geologic areas, the City will require a geologic report that includes analysis of soils foundation, grading, erosion, and sediment control.

14. The City will ensure that existing and new development in areas with identified significant geologic hazards are sited to minimize the exposure of structures and improvements to damage resulting from geologic hazards, and to minimize the aggravation of offsite geologic hazards.

GOAL F: TO ENSURE THAT CITY EMERGENCY PROCEDURES ARE ADEQUATE IN THE EVENT OF POTENTIAL NATURAL OR MAN-MADE DISASTER.

Policies

1. Regularly update the City's Multi-Hazard Emergency Plan. As part of the periodic update, the City will review County and State emergency response procedures that must be coordinated with City procedures.
2. Support the County's Hazardous Waste Management Plan.
3. Utilizing State and County sources, maintain an inventory of sites with storage or use of significant quantities of hazardous materials.
4. Require a use permit for any commercial or industrial use involving significant quantities of hazardous materials. Hazardous materials management plans shall be required as a condition of approval for such permits. [Significant quantities are determined under the County's Hazardous Waste Management Plan.]
5. Conduct periodic emergency response exercises to test the effectiveness of City emergency response procedures.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will regularly update the City's Multi-Hazard Emergency Plan. The City's Multi-Hazard Emergency Plan designates emergency evacuation routes as Highway 101 and Highway 128.
2. The City will incorporate the County's Hazardous Waste Management Plan into City Plans and Policies.
3. The City will maintain an inventory of sites with storage or use of significant quantities of hazardous materials utilizing State and County information. The City will review its zoning code to ensure that the zoning code requires a use permit for any use involving significant amounts of hazardous materials.
4. The City will conduct periodic emergency response services to test the effectiveness of City emergency response procedures and more widely disseminate copies of the City's Multi-Hazard Emergency Services Plan to the general public and affected agencies.

GOAL G: TO PROVIDE APPROPRIATE REGULATIONS OF LAND USE AND AIRPORT OPERATIONS TO ENSURE THAT THE SAFETY OF AIRPORT OPERATIONS AND PERSONNEL AND THE GENERAL PUBLIC AND ADJACENT STRUCTURES ARE PROTECTED.

Policies

1. Future development and use of the City Airport shall be consistent with the policies and programs as established in the Cloverdale Municipal Airport Master Plan as adopted in October 1988. Any proposals for expansion and/or development of the airport shall be referred to the Sonoma County Airport Land Use Commission.
2. Make every effort to ensure that runway length and safety areas meet Federal Aviation criteria.
3. Ensure that approach zones, clear zones, and landing thresholds are maintained to Federal Aviation Regulations and State Division of Aeronautics.
4. Protect the airport property from erosion and flooding hazards.
5. Building sites on the airport property should be clustered in areas outside the approach zone and overflight zone, and set back as deemed appropriate from the extended runway centerline and typical flight tracks.
6. Discourage residential, noise-sensitive developments or significant expansions thereto located near the airstrip or under an overfly route. The area of concern with future development lies within "referral area" delineated by the County Airport Land Use Commission. (See Exhibit 10) Until future annexation, the City will work with the County in unincorporated areas to ensure that developments are required to dedicate airport easements, deed restrictions or file "buyer beware" notifications to ensure that prospective buyers are aware of the airport's influence. The restrictions shall include the following as appropriate:
 - a. A right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement (set in accordance with Federal Aviation Regulations Part 77).
 - b. A right to subject the property to noise, vibration, fumes, dust, and fuel particle emissions associated with normal airport activity.
 - c. A right to prohibit the erection or growth of any structure, tree or other object that would enter the acquired airspace.
 - d. A right-of-entry onto the property, with appropriate advance notice, for the purpose of removing, marking or lighting any structure or other object that enters the acquired airspace.
 - e. A right to prohibit electrical interference, glare, misleading light sources, visual impairments, and other hazards to aircraft from being created on the property.

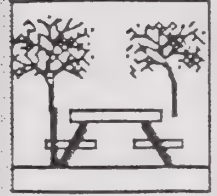
7. Prohibit objects or structures to be erected in critical areas which, because of height or other factors, would result in an increase in the minimum ceiling or visibility criteria for an existing or proposed instrument approach procedure.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will implement the Cloverdale Municipal Airport Master Plan. The plan shall be regularly reviewed and updated as appropriate. An airport safety ordinance should be prepared to address height limitations, buildings locations, approach zone(s) and land use restrictions for the lands affected by the operation of the airport. Provisions of the ordinance should also require discretionary permits for any use or structure.
2. The City will work with Louisiana Pacific or future adjacent property owners to ensure that height limitation standards are met for the Runway 14 Clear Zone.
3. The City will monitor erosion control work and consider levees or rip-rap protection for the Airport property.
4. Through Master Plan, environmental, and project review, the City will ensure that building areas take into account the flood potential at the south-end of the airport.
5. The City will issue timely FAA Notices to Airmen to advise airport users of any flooding as it occurs.
6. Through the Zoning Ordinance, environmental, and project review, the City will ensure building sites on the airport property are located appropriately to avoid safety hazards.
7. Through environmental and project review, the City will regulate property located near the airport such that no structures are constructed which would interfere with aircraft operations.
8. The City shall ensure that through Master Plan, project, and environmental review, any change in the length or location of runway use shall require safety studies to determine the measures needed to ensure safe airport operations and that adjacent/nearby land uses will not be adversely affected.
9. Through the General Plan, Zoning Code, and environmental review, the City will strongly discourage new residential development within the 55 CNEL contour, and discourage inappropriate land use developments beneath the aircraft traffic pattern. The City will utilize the "Airport/Land Use Noise Compatibility Criteria" in evaluating the acceptability of development proposed within the "referral area" boundary.
10. The City will work with the County and the Sonoma County Airport Land Use Commission to ensure consistency in the application of land use regulations on all projects proposed within the "referral area" (See Exhibit 10).
11. The City will work with the County and private property owners to ensure the airport access road is widened and well-maintained.

PARKLANDS AND RECREATION ELEMENT



INTRODUCTION

The Parklands and Recreation Element consists of the general location of existing and proposed parkland uses. The element identifies existing recreational facilities, determines recreational needs, and provides the framework for future park and recreational decisions within the City of Cloverdale. (Please refer to Exhibit 6). Several findings were made in the General Plan Master Environmental Assessment (MEA), Issues paper, and recommendations by the Parkland Advisory Committee including: the City of Cloverdale is committed to expanding the park facilities and services for residents, and, funding sources shall be sought for the expansion of parks and recreation.

GOALS, POLICIES AND IMPLEMENTATION PROGRAMS

GOAL A: TO ENSURE VARIETY AND AMPLENESS OF PARKLANDS FOR THE CLOVERDALE COMMUNITY.

Policies

1. Ensure that parkland standards are met to increase the amount of City parklands.
2. Establish priorities among the various recreational needs of the City.
3. Encourage the development of community-oriented facilities for Cloverdale.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will use the following definitions of parkland uses as shown in Table F.
2. The City will follow the parkland standards of use versus acreage (as set within the 5 acres/1,000 population criteria) as shown in Table G.
3. The City will consider the parkland deficit analysis when considering new recreational facilities as shown in Table H.

TABLE F
PARKLAND DEFINITIONS

TYPE	DEFINITION
<u>Children's Play Equipment</u>	Oriented toward the tot to preschool age children. One play facility is recommended for each 1,000 square feet of primary space included in a sand area. A necessary element of parks to complement open space areas. For safety, play equipment should not be located within 40 feet of any wide street frontage. Play equipment consists of climbers, swings, paddle pools, slides, playhouses, and play sculpture.
<u>Children/Adult Field Sports and Field Play Areas</u>	A component of parks which offers active recreational activities which, upon minor modification, can incur both children and adult field sports. Field Sports may include softball, baseball, soccer, swimming pools, etc. Field Play areas are recommended for areas with large populations of children. Field play areas may include either 1) an open turfed area for active play, or, 2) a shaded area for quiet activities. Field Play areas consist of such amenities as minor field hockey or soccer fields, spray pools, kick ball or sanded areas.
<u>Open Space Recreation</u>	Emphasis on low intensity uses, not on organized court games or field sports commonly found in Community Parks. Uses include picnicking, water sports, bicycling and bicycle routes, hiking trails, camping, nature trails, etc.
<u>Court Games</u>	A component of parks which involves the improving of a surface for active recreation (mostly adult) use. Court Games may include tennis, basketball, soccer, volleyball, bocci ball, shuffleboard, handball, paddle tennis, etc.

Continued.

TABLE F (Cont.)

TYPE	DEFINITION
<u>Parking Facilities</u>	Parking facilities adequate to service all on-site recreational needs.
<u>Community Center and Administration</u>	Split into three categories such as Community Center, Administrative and Maintenance. This facility will be an indoor recreation facility. It will include volleyball, basketball, game rooms, etc. Each community park will not necessarily contain a community center.

Source: Parkland Advisory Committee, 1990

TABLE G
PARKLAND STANDARDS

PARKLAND USES	ACRES
Children's Play Equipment	0.5
Children/Adult Field Sports and Field Play	2.0
Open Space Recreation	1.25
Court Games	0.3
Parking Facilities	0.75
Community Center and Administrative	0.2
TOTAL	5.00

Source: Parkland Advisory Committee, 1990.

TABLE H
PARKLAND DEFICIT ANALYSIS

ACTIVITY	EXISTING 1989*	DESIRED	DEFICIENT
Children's Play Equipment	0.5	2.5	-2.00
Children/Adult Field Sports Field Play	5.2	10	-4.80
Open Space Recreation	0.5	6.25	-5.75
Court Games	1.2	1.5	-0.30
Parking	0.3	3.75	-3.45
Community Center/Admin.	0.1	0.50	-0.49
TOTAL	7.6	25.00	-17.40

Source: Parkland Advisory Committee, 1990.

Numbers are in acres.

4. From highest to lowest priority, the following park need priorities include:

- Community Park
- Open Space Recreation
- Neighborhood Park
- Community Center
- Regional Park

5. The City will include the following definitions and classifications for their development priorities as shown below:

Community Park: Sized at a minimum of five to a maximum of 15 acres with an array of recreational facilities for all age groups. High priority is placed on Children/Adult Field Sports and field play areas, children's play equipment and court games. Lower priority is placed on open space recreation and large scale court games. Community Centers are acceptable as a compatible use.

Open Space Recreation: Sized at five to 40 acres. High priority is placed on low intensity uses such as picnicking, bicycling and bicycle routes, camping, hiking, water sports. This parkland designation is oriented toward maintaining and utilizing the natural terrain or resources as part of the amenities. Low priority is placed on active recreation uses.

Neighborhood Park: Sized at less than three acres. High priority is placed on servicing the preschool age children and families. Facilities should include children's play equipment, a small number of court games, and open space. Low priority is placed on field sports or large-scale court games.

Community Center: Sized as a minimum of 0.5 acre to three acres. If the area is available, can be included as part of a Community Park. Such a center would be devoted to community activities and/or functions. A high priority for this facility is adequate circulation and on-site parking.

Regional Park: Sized at around 10 acres to unlimited acreage. Provides an expanded range of recreational facilities that the City itself can not provide for such as boating, swimming, golf, tennis, hiking, fishing, camping and equestrian trails. The impetus for such a facility is on regional attraction. Facilities may be publicly or privately developed on public lands, private lands, or a combination of public and private lands.

GOAL B: TO MAINTAIN AND PROVIDE SUITABLE PARK SITES.

Policies

1. Require development and expansion of existing riverfront park sites.
2. Provide for a landmark visitor park area (community center).
3. Provide for neighborhood parks as shown on the Land Use Map and Parklands Map.
4. Maintain and provide for community parks as shown on the Land Use Map and Parklands Map.

5. Provide for City parks.
6. Provide for regional parks and recreation facilities.
7. Develop and implement a City-wide pedestrian/bicycle trails system linking recreational, education, and transportation facilities.
8. Investigate techniques to increase parkland in the City and Study Area.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will form a Committee to examine constraints to riverfront park development. The City will establish a development plan for a riverfront park with corresponding timeframe.
2. The City will classify Wright Park as an "Open Space Recreation" facility with emphasis on riverfront uses.
3. The City, in conjunction with CALTRANS will coordinate as to location, size, and dedication process for securing Landmark Visitor parkland.
4. The City will explore the potential for designating the Landmark Visitor Park as a Community Center (de-emphasizing the visitor center use).
5. The City will examine funding sources for developing a community center.
6. The City, in conjunction with CALTRANS, will work towards expanding the neighborhood park sites to the east of the proposed Highway 101 Bypass.
7. The City will determine priorities for future neighborhood park uses.
8. The City will maintain a community park on the M.P. Rosen property.
9. The City will require developers to provide services and amenities in community parks.
10. The City will require developers to provide parkland on parcel as required by the Parkland Ordinance.
11. The City will classify Porterfield Creek as a "Community Park" in the General Plan. A creek buffer is indicated on the Conservation/Open Space Element Map.
12. The City will establish plans for future community park expansions.
13. The City will maintain uses and any expansion of uses of the existing City Park as a "Community Park." The City will maintain use of the ballfield at the existing City park.

14. The following priorities of development for park sites within the City limits will include:
 - Wright Park
 - Expansion of City Park
 - Porterfield Creek
 - Expansion of Tarman Park
 - Landmark Visitor Park
 - Citywide Bike/Pedestrian Trails coordinated with the Downtown Specific Plan
 - Furber Park
15. The City will focus on providing regional park and recreation facilities emphasized on beachfront property.
16. The City will examine the potential for developing City Airport and Rolando properties as areas for regional park and recreation facilities development.
17. The City, in conjunction with the County, will work to identify regional park facilities and examine funding sources.
18. The City will encourage expansion of a City-wide trail system throughout the study area.
19. The City, in conjunction with Sonoma County will establish a regional trail system to access Russian River areas and the western hillside region.
20. The City, in conjunction with CALTRANS, will establish a bike lane along Highway 101/frontage.
21. The City will require developers to install streets with bike lanes as appropriate.
22. The City, in conjunction with CALTRANS, will designate a bicycle/pedestrian trail along the North Western Pacific Railroad.
23. The City will require preferred parkland sites within current City limits through dedications, easements, or acquisition. These sites may include:
 - a. The City will designate (APN 116-11-24/Angelli Vineyard) as a potential expansion site for the City Park and maintain land as a community park.
 - b. Encourage the development of the downtown plaza in the Downtown Specific Plan Area.
24. The City will require preferred parkland sites within the adopted Sphere of Influence through dedications, easements, or acquisition. These sites may include:
 - a. Boehm/Seghesio Properties (APN's 116-12-04,07). The site will be designated as a future community park with area targeted at 10-15 acres, and should be sited west of Foothill Boulevard alignment.
 - b. City Property/Santana Lane (APN 116-31-08). This location will combine former landfill site with property to north and any dedications from CALTRANS to construct a smaller scale community park of 5-10 acres. It should emphasis active field sports.

- c. Western Hills Regional Park (an area above initial ridgeline). This will be developed as a regional facility. Uses are open space and recreation with a trail system for hikers, equestrians, and bicycles. It is recommended that a trail system be linked to Lake Sonoma.
 - d. Hiatt Road/Kelly Road Area (an area southwest of current City limits). The City will examine the feasibility of having park facility at juncture of Kelly and Hiatt Roads. Uses should feature community park theme.
 - e. City Airport (APN's 117-060-42,43,45 & -070-07). The City will encourage use of property as open space recreation in conjunction with airport or allow for a joint development proposal if airport use is terminated. The joint development use should feature a nature trail/education facility with a private vendor-operated facility.
25. The City will encourage the formation of Mello-Roos Districts for the development of parkland and recreation facilities.
26. The City will investigate funding sources to acquire property or parks including the following:

County/State Funding Sources

- a. Community Parkland Act/1986. City is eligible for \$20,000 a year into 1991. Total amount of available funds for 1990-91 is potentially \$40,000.
- b. Parkland Conservation Bond Act of 1988 (Proposition 70). The City is eligible for funds made available under the passage of Proposition 70. These programs include:
 - Trail Grant Program. \$5 million available on statewide level to public agencies for acquisition and development of trails.
 - Per Capita Grant Program. \$120 million available on statewide level to public agencies for acquisition, rehab, development and restoration of recreation lands/facilities.
- c. Roberti-Z'berg - Harris Urban Open Space Grant Program. \$20 million available to public agencies with 30 percent matching share requirements for acquisition and development of open space oriented parklands.
- d. Transportation Development Act (TDA). The Sonoma County Transportation Authority has set aside approximately \$30,000 for Cloverdale for improvement or development of bike trails.

Optional Sources of Future Revenues

- a. Recreation Assessment District. Upon a consensus vote of the populace, the City could create a Recreation Assessment District. The District would have the

authority to levy fees on individual landowners within the City. The fees would be used to develop, expand or maintain recreation facilities.

- b. Revenue or General Obligation Bond Measure. The City could place a measure on the ballot for voter's approval which authorizes the City to issue bonds to pay for recreational facilities. As of this date, the City of Cloverdale has not issues a bond to finance any aspect of its improvements.
- c. User Fee. The City could implement a User Fee at its recreational facilities to cover the costs of their operation and maintenance. User fees are typically installed at regional facilities.

COMMUNITY DESIGN ELEMENT



INTRODUCTION

The Community Design Element addresses the design of the downtown, community scenic highway entries, interchanges, non-residential buffering, hillside development compatibility, signage, landscape/hardscape standards and public spaces as a means to creating a healthy, beautiful, functional, and prosperous City. One major finding made in the Downtown Specific Plan was that Cloverdale's Beautification Plan of the downtown is necessary in order to draw the desired economic activity into the area. Presently, the City is perceived as a long, narrow thoroughfare lacking: cohesiveness, a center, landscaping, attractive pedestrian paths, and appropriate landmarks. The City is also perceived as automobile oriented. Other findings made in the Draft EIR for the Redevelopment Project include: the Cloverdale Bypass will alter traffic patterns in the City, and the City will need to encourage the establishment of landscape buffers between incongruous land uses.

GOALS, POLICIES, AND IMPLEMENTATION PROGRAMS

GOAL A: ESTABLISH OVERALL SENSE OF CLOVERDALE PLACE AND TIME THROUGH ITS COMMUNITY DESIGN STATEMENT.

Policies

1. Encourage agriculture and open space outside City limits.
2. Maintain hillside buffers to protect prominent ridgelines.
3. Maintain creek and river buffers to protect riparian habitats.
4. Follow the guidelines set out in the Downtown Specific Plan.
5. Discourage auto-reliant uses within the City.
6. Alter traffic patterns to encourage pedestrian traffic.
7. Encourage buffers between incongruous uses.
8. Develop landscape standards for all future development.
9. Eliminate sign blight.
10. Eliminate overhead utility lines.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will monitor projects in the unincorporated areas of the Study Area and in the hillside areas of the City through the environmental review process.
2. The City will implement hillside protection as outlined in Goal E below.
3. The City will implement policies and programs for creek and river buffers as outlined in the Conservation/Open Space Element and below.
4. The City will implement policies and programs of the Downtown Specific Plan as outlined in Goal B below.
5. The City will develop and landscape entries to downtown including south entry (the triangular site, near the access to the proposed Highway 101 Bypass). The City will secure the site from Caltrans.
6. The City will provide bicycle lanes in accordance with a bikeway master plan.
7. The City will develop and implement a signage program to accommodate pedestrian safety.
8. The City will implement a program to promote buffering as outlined in Goal D below.
9. The City will implement a set of design guidelines for: landscaping of parking lots, screening of car storage and lumber yards, etc., building design and signage.
10. The City will establish an ordinance to protect healthy specimen native trees. Standards will be adopted to allow for flexibility in preserving trees when adding sidewalks and other infrastructures.
11. The City Community Development Agency will develop a loan program to provide awnings and or trellis-covered walks, remodel buildings (including structural upgrading), and to replace signage.
12. The City will encourage support and participation by service clubs, businesses, and property owners in streetscaping and upgrading of existing buildings.
13. The City will encourage aesthetic improvements and seismic and other rehabilitation of existing buildings by development of a loan program using redevelopment funds.
14. The City will develop a theme for city parking and street signs.
15. The City will develop and implement street and directional sign program.

16. The City will encourage replacement of non-conforming signage through the following means:
 - Offer incentives funding through the Community Development Agency.
 - Prepare sign ordinance with amortization program.
17. The City Community Development Agency will develop and implement a program to place all overhead utility lines underground.

GOAL B: TO ENHANCE THE QUALITY OF LIFE AND ENVIRONMENT IN THE DOWNTOWN AREA.

Policies

1. Support implementation of the Downtown Specific Plan.
2. Establish a landscaping/streetscaping program for sidewalks, crosswalks, and parking areas.
3. Regulate the aesthetics of new and remodeled buildings and signage.
4. Protect landscaping, specifically specimen trees.
5. Encourage a more comfortable, beautiful, and safe environment.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will implement the Downtown Plan through project and environmental review and a Capital Improvements Plan.
2. The City will develop a specific plan for all streetscaping within the defined downtown area. The City will implement a streetscaping program emphasizing drought-resistant landscaping and lower intensity lighting.
3. The City will develop the following improvements to Cloverdale Boulevard:
 - Prepare median strip for planting.
 - Create circle (opposite Broad Street) with fountain.
 - Streetscaping including taupe paving, historic style street signs, benches, bike racks, tree gates, street lights, and trash receptacles.
4. The City will encourage aesthetic improvements and seismic and other rehabilitation of existing buildings by development of a loan program using redevelopment funds.

5. The City will establish an ordinance to protect healthy specimen native trees. Standards will be adopted to allow for flexibility in preserving trees when adding sidewalks and other infrastructures.
6. The City will provide streetscaping on Commercial, First, Second, and Third Streets as defined in the Downtown Specific Plan. The City will provide streetscaping west of Cloverdale Boulevard and east of Main Street one block.
7. The City will explore options for providing meaningful open space.
8. The City will connect the downtown area to the river with a special enhanced pedestrian path along First Street.
9. The City will secure open space in blocks between First and Second Streets and Second and Third Streets between Cloverdale Boulevard and Commercial Street. This will include the development of a specific plan for inclusion in the zoning ordinance which will implement setback requirements for specific properties involved.
10. The City will create a Youth Park by expanding City property at Third Street and Cloverdale Boulevard.
11. The City will create a town plaza on Broad Street by converting a portion of the street and implementing setbacks west of the Post Office and on the south side of the street. The City will also create an adjoining public parking lot.
12. The City will provide textured crosswalks at intersections within the downtown area.
13. The City will prepare a traffic study investigating traffic signals and stop signs to effectively control traffic in the downtown area.

GOAL C: TO ESTABLISH A COMMUNITY ENTRY STATEMENT INTO AND OUT OF CLOVERDALE.

Policies

1. Enhance major entrances and interchanges areas to Cloverdale in order to provide definitive gateways to the City.
2. Protect and enhance the visual corridors of scenic routes. Adopt a plan of scenic highways which identifies those areas where scenic highway viewsheds will be analyzed and reviewed prior to development to assure their preservation.
3. Provide a balance between the community's quality of life and tourism activities.
4. Regulate the location of franchises and highway oriented commercial development within the City of Cloverdale's General Plan Study Area.
5. Encourage compatible development on adjacent County lands.
6. Develop methods and standards for viewshed analysis to assure the preservation and enhancement of natural scenic resources both inside developments and on their surrounding roadways.

7. Develop signage standards, and architectural design criteria for developments near interchanges.
8. Promote commercial land uses which complement surrounding areas near the interchanges.
9. Prepare design and land use standards which lend character and identity to the City for all of the major entry points.
10. Encourage compatible development at the central and southern interchanges of the proposed Highway 101 bypass. Encourage open space and agricultural uses around the northern interchange.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will prepare an Urban Design Plan for selected entrances and interchanges to the City.
2. The City will pursue the guidelines and policies for scenic corridors established in the County's Open Space Element.
3. The City, in conjunction with the County of Sonoma, will investigate official designation of Highways 101 and 128 as Official Scenic Highways.
4. Using citizen input, the City will develop guidelines for each proposed scenic route corridor as required by the state, including guidelines for land use, site planning, outdoor advertising, landscaping, earth moving, and design.
5. The City will develop Zoning Code provisions to require that new development at the major entrances to the City be aesthetically pleasing in design, provide buffering between land uses, and retain open space and unique land features.
6. The City will establish a Scenic Highway overlay in the Zoning Code to ensure development retains scenic vistas along Highway 101 and Highway 128.
7. Any highway oriented commercial development must require a Conditional Use Permit and be subject to extensive design review.
8. Through the environmental review process, the City will analyze County-proposed developments for compatibility with adjacent City uses.
9. The City will support the implementation of the Hillside Development Guidelines as described in the Community Design and Conservation and Open Space Elements.
10. The City will adopt free-standing signage regulations which will include limits as to size, scale, and number as permitted in the City Zoning Ordinance. The City will encourage replacement of non-conforming signage by offering incentives through the City's Redevelopment Agency.

11. The City will require a design review of all proposed commercial uses near interchanges in accordance with established Design Guidelines.
12. Through a specific plan, the City will encourage developments which are harmonious and provide a "gateway" statement at the middle interchange to provide a pleasing entrance to the downtown. The City will regulate development at the southern interchange to ensure compatibility with existing and future development. The northern interchange is encouraged to be developed with low intensity uses such as open space and agriculture. The City will work with the County to promote such uses.

GOAL D: TO PROMOTE BUFFERING BETWEEN RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT.

Policies

1. Develop setback standards providing adequate buffering in residential and non-residential development areas.
2. Ensure proposed development provides adequate landscape buffering.
3. Limit building construction materials which are visually distracting.
4. Review architectural treatments for compatibility.

Implementation Programs

The following programs need to be reviewed annually, as required by State law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will adopt setback standards in the City Zoning Ordinance which will include buffering requirements for both residential and non-residential uses.
2. The City will approve the types of building materials which do not detract visually from the surrounding areas, and that are compatible with surrounding materials through the Design review process.
3. The City will prepare City-wide streetscape, landscape, and buildings design standards to promote compatible development. The evaluation of design will include the following:

Location: The building's context such as location on the block, area's character, adjacent buildings' character, and visual prominence.

Architectural Elements: Architectural features such as arcades, entry elements, building tops/roofs, bases or other featured elements.

Fenestration: The type of window patterns a building has such as, horizontal banding, punched, recessed, or gridded.

Facade Rhythm: The horizontal and vertical patterns expressed by cornices, columns, fenestration or variations in massing.

Materials: The cladding material character such as brick, stone, stucco, metal panel or spandrel glass systems.

GOAL E: TO CONTROL DEVELOPMENT IN HILLSIDE AREAS IN ORDER TO PRESERVE THEIR AESTHETIC QUALITIES AND PROTECT SENSITIVE AREAS FROM DEGRADATION.

Policies

1. Rely on existing and man-made features to give shape and form to Cloverdale. To this end, new development shall not breach the Study Area boundary, except as may be required for the establishment or expansion of public facilities.
2. Encourage the use of native and drought-tolerant plant species in landscaping and in the replanting of cut slopes.
3. Allow development only in a manner that protects important, visually prominent ridgelines and landmarks and scenic hillsides above 400' in elevation. To determine whether a ridgeline is considered prominent, the following criteria shall be applied:
 - A. Ensuring that hillside development is related to the "view from the valley", particularly from a scenic roadway.
 - B. The ridgeline is shown on Exhibit 7 of the Open Space and Conservation Element as constituting a prominent ridgeline.
 - C. The ridgeline or hillside is visible from the valley floor for more than one thousand (1000) continual linear feet as seen from a major roadway listed in Program #5 below.
4. During any construction, keep grading to a minimum and create a balance between cut and fill.
5. Maintain significant views of prominent ridgelines from public rights of way and other public open spaces, especially major highways. Proposed structures shall not obscure major ridgelines when viewed from City designated roadways.
6. Design streets so as to maintain the aesthetic quality and geologic integrity of the hillside.
7. Where possible, encourage development to be clustered so as to minimize visual impacts on hillsides. Minimize alteration of drainage patterns and vegetation of land characterized by slopes of ten percent or more.
8. Encourage areas in the incorporated City limits and areas of lower elevation in the Sphere of Influence and Study Area to develop first prior to allowing development in the hillsides.
9. Protection of distinctive natural vegetation such as oak woodlands, riparian corridors and mixed evergreen forests shall be encouraged.

Implementation Programs

The following programs need to be reviewed annually, as required by State Law. Government Code Section 65400 requires municipal planning commissions to render an annual report to their municipal legislatures on the status of the General Plan and progress in its implementation. Responsibility and time frames for each of the programs are shown in Appendix A.

1. The City will subject all proposed hillside developments to design review. The City will develop Hillside Development Guidelines (HDG). All hillside development prior to the adoption of the HDG by the City Council will require "approval in concept" by the Planning Commission or City Council before applications are accepted. The concept approval shall require submission of a model or 3-dimensional exhibit showing the extent of all development related to existing conditions.

The City shall use the following factors in determining the suitability of a hillside or ridgeline for development in their review process:

- A. Consistency with Hillside Development Guidelines (HDG).
 - B. Level of disturbance to natural terrain associated with grading activities or vegetation removal.
 - C. Whenever possible, avoid the grading of slopes > 20% and work in a sensitive manner with construction of access routes.
 - D. Visibility of site from valley floor and public viewing points, particularly major roadways.
 - E. Level of disturbance to natural landmarks or visually prominent ridgelines or hillsides, both on and off-site.
 - F. Impact upon public services.
2. The City will encourage the protection of the natural landforms and vegetation of the hills (above 400') as much as possible, particularly along ridgelines and in areas characterized by steep slopes. The City will ensure that hillside developments consider the following in the HDG and all future reviews:
 - A. Minimize Perception of Bulk
 - Minimize changes to natural topography
 - Follow hillside contours
 - Use materials and colors to reduce bulk
 - Minimize building height
 - Design structure to fit with existing neighborhood
 - Use architectural features to break up massing
 - Avoid long single-ridge rooflines
 - Use terraced roof and building lines
 - B. Integrate Structures with Environment
 - Use natural materials and colors
 - Integrate with environmental texture and forms
 - Use existing landscaping to blend structure with environment
 - Integrate all structures on a single site
 - Blend roof and parking surfaces with environment
 - Integrate fences and walls with structures and setting

C. Avoid Interference with Privacy

- Control view to adjacent properties
- Locate buildings to minimize privacy impact
- Use landscaping to enhance privacy
- Reduce noise impacts on adjacent dwellings
- Control exterior light and glare sources

D. Preserve Views and Access To Views

- Ensure that hillside development is related to the "view from the valley", particularly from a scenic roadway.
- Encourage compact development is screened by trees or other natural features.
- Relate building design, color, height and placement to terrain and natural features.
- Maintain ridgelines and views of natural landmarks such as the Russian River, Red Mountain, Pine Mountain, or western slopes.

3. The City will develop a list of acceptable native and drought-tolerant species for landscaping and replanting of cut slopes on hillside properties. The City will regulate street trees in hillsides to avoid a uniform "subdivision" appearance.

4. The City will ensure that major scenic ridgelines and highly visible hillsides are protected from visually obtrusive development. To this end, a visibility analysis shall be required for the creation of subdivisions and other projects located on prominent ridgelines or hillsides as defined in Policy #3 above. (See Exhibit 7)

Only developments that are shown to be unobtrusive as viewed from scenic roadways and based on this analysis may be approved. Proposed structures shall not obscure the major ridgelines when viewed from the City designated roadways.

5. The viewshed along scenic highways and streets will be primarily used to evaluate and determine the level of visual impact that a hillside development might cause. The following road segments are declared scenic roads for the purposes of the Cloverdale General Plan and City land use regulations:

- State Highway 101 Bypass--entire length of planning area.
- Cloverdale Boulevard--entire length of planning area.
- Foothill Blvd.--entire length (when constructed) within planning area.
- Cherry Creek Road--west of Foothill Boulevard.
- Hot Springs Road--west of Foothill Boulevard.
- First Street--west of Foothill Boulevard.
- Healdsburg Avenue--west of Franklin Avenue (future alignment).

City scenic road and street efforts will be coordinated with the County's scenic highway program.

6. To minimize changes to natural topography, hillside development will consider the following:

- Merge building into the hillside (terrace building floor levels)
- Balance cut and fill
- Use underground spaces to reduce bulk

- Screen foundations and undersides of structures
 - Discourage pads and terracing of home sites
7. The City will approve roads serving hillside development that follow natural contours. Curbside parking will be minimized or prohibited. Slow speeds will be encouraged. The City will review and update hillside road standards.
 8. The City will revise its Planned Unit Development Ordinance to further encourage creative design and clustering of developments in hillside areas in accordance with the densities prescribed in the Land Use Plan.
 9. The City will ensure that developments (i.e., vineyards, residential lots, etc.) does not encroach into river and creek buffers. The 50-foot setback areas (on each side, for a total 100-foot buffer) are shown on the Conservation and Open Space Element Map.
 10. Project applicants will be required to submit detailed environmental information including topography, preliminary grading and drainage plans, road and building plans, and tree and vegetation preservation/removal plans.
 11. Through the environmental review process, the City will analyze areas of ecological sensitivity in relation to the proposed development.
 12. The City will implement a growth phasing plan for the Study Area as outlined in the Land Use Element that encourages those areas within the City limits and at lower elevations in the Sphere of Influence and Study Area to be developed first, prior to allowing development in hillside areas.

REPORT PREPARATION RESOURCES

City of Cloverdale

Planning Department

Joe Heckel
Eileen Carroll
Kevin Lundborg
Jim Miner
R. P. Dailey
Fred Browne
Phil Cann

Fire Department

Police Department

Public Works Department

Consultant Team

STA Planning, Inc.

Fred Talarico
Lisa Grueter
Deidre Gee
Jonathan Stern
Mimi Rebagliati
Rhonda Christensen

Contributors

Fiscal and Market Analysis

Dale Levander
The Levander Company

Housing Element Review

Ralph Castañeda
Castañeda and Associates

Traffic/Circulation Analysis

Steve Weinberger
TJKM Transportation Consultants

Noise Analysis

Fred Greve
Mestre Greve Associates

Biological Resources Analysis

Charles A. Patterson

Cultural Resources Analysis

Miley P. Holman
Holman & Associates

APPENDIX A
RESPONSIBILITY CHART

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Community Development - Land Use				
A	1	1	FY 1992-1993	CC PC PD
	2	2	FY 1992-1993	CC PC PD
	3	3	Ongoing	CC PC PD
	4	4	Ongoing	CC PC PD
		5	FY 1993-1996	CC PC PD
	5	6	FY 1992-1993 Ongoing	CC PC PD
B	1	1	Ongoing	CC PC PD PW
	2	2	FY 1992-1994	CC PC PD CDA
	3	3	Ongoing	CC PC PD PW
		4	Ongoing	CC PC PD PW
		5	Ongoing	CC PC PD PW
		6	Ongoing	CC PC PD CDA
	4	7	FY 1993-1996	CC PC PD
C	1	1	Ongoing	CC PC PD PW
	2	2	Ongoing	CC PC PD PW
	3	3	FY 1992-1994	CC PC PD
D	1	1	Ongoing	CC PC PD
	2	2	Ongoing	CC PC PD
	3	3	FY 1992-1993	CC PC PD

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX A
RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Community Development - Land Use				
E	1	1	FY 1993-1995	CC PC PD
	2	2	FY 1993-1994	CC PC PD
		3	FY 1994-1996	CC PC PD
		4	FY 1994-1996	CC PC PD
		5	FY 1992-1993	CC PC PD
	3	6,7	Ongoing	CC PC PD
	4	8	Ongoing	CC PC PD
	5	9	Ongoing	CC PC PD PW
F	1	1 (ordinance)	Ongoing FY 1992-1995	CC PC PD PW
	2	2	FY 1992	CC PC PD PW
		3	FY 1992-1993	CC PC PD PW
	3	4	FY 1993-1996	CC PC PD PW
		5	Ongoing	CC PC PD PW
		6	Ongoing	CC PC PD PW
	4	7	Ongoing	CC PC PD PW
	5	8	Ongoing	CC PC PD PW
		9	Ongoing	CC PC PD PW
		10	Ongoing	CC PC PD PW
		11	Ongoing	CC PC PD PW

Continued.

CC = City Council
PC = Planning Commission
CDA = Community Development Agency

PW = Public Works
PD = Planning Department
FD = Fire Department
PL = Police Department

APPENDIX A
RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Housing				
A	1	1	Ongoing	CC PC PD
	2	2	Ongoing	CC PC PD
	3	3	FY 1992 to 1995	PD CDA
	4	4	Ongoing	CC PC CDA PD
	5	5	FY 1992 to 1995	CDA PD
	6	6	Ongoing	CC PC PD
	7	7	FY 1992 to 1995	PD
	8	8, 9, 10	FY 1992 to 1994	CC PC PD
	9	11-16	FY 1992 to 1995	CC PC CDA PD
B	1	1, 2	Ongoing	PD
	2	3	Ongoing	PD
	3	3	Ongoing	PD
		4	FY 1992 to 1993	CC PC CDA PD
	4	5	FY 1992 to 1993	CC PC CDA
	5	6	Annual	CC PC PW PD
C	1	1	FY 1992 to 1994	CC PC PD
	2	2	Ongoing	PW
	3	3	FY 1992 to 1994	CC PC PD
	4	4	Ongoing	CC PC PD
	5	5	FY 1992 to 1993	CC PC PD
	6	6	FY 1992 to 1993	CC PC PD

Continued.

CC = City Council
PC = Planning Commission
CDA = Community Development Agency

PW = Public Works
PD = Planning Department
FD = Fire Department
PL = Police Department

APPENDIX A
RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Housing				
C	7	7	FY 1992 to 1993	CC PC PD
	8	8	FY 1992 to 1993	CC PC PD
	9	9	FY 1992 to 1993	CC PC PD
D	1	1	FY 1992 to 1995	CC PC PD
	2	2, 11	FY 1992 to 1995	CC PC CDA PD
	3	3	Annual	CC PC PW PD
	4	4	Ongoing	CC PC PD
	5	5	FY 1992 to 1993	CC PC PW PD
	6	6	Ongoing	CC PC PD
	7	7	FY 1992	CC PC PD
		8	Ongoing	CC PC PD
		9	FY 1992	CC PC PD
		10	FY 1992 to 1993	CC PC PD
E	1	1	Ongoing	CC PC PD
	2	1	Ongoing	CC PC PD
	3	2	Ongoing	CC PC PD
F	1	1	Ongoing	CC PC PD
		2	Ongoing	CC PC PD
	2	3	FY 1993 to 1994	CC PC PD
		4	FY 1993 to 1995	CC PC PD
	3	5	FY 1992 to 1994	CC PC PD

Continued.

CC = City Council
PC = Planning Commission
CDA = Community Development Agency

PW = Public Works
PD = Planning Department
FD = Fire Department
PL = Police Department

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Circulation				
A	1	1	Ongoing	CC PC PD PW
	2	2	Annual	CC PC PD PW
	3	3	As Requested by County	CC PC PD PW
	4	4	FY 1992-2000	CC PC PD PW
	5	5	Ongoing	CC PC PD PW
	6	6	Ongoing	CC PC PD PW
	7	7	FY 1992	CC PC PD PW
	8	8	FY 1992-1996	CC PC PD PW
B		9	FY 1992-1994	CC PC PD PW
	1	1	Ongoing	CC PC PD PW
		2	Ongoing	CC PC PD PW
C		3	Ongoing	CC PC PD PW
	1	1	FY 1992-1996	CC PC PD PW
	2	2	Ongoing	CC PC PD PW
		3	Ongoing	CC PC PD PW
	3	4	Ongoing	CC PC PD PW
	4,5	5	Ongoing	CC PC PD PW
D		6	Ongoing	CC PC PD PW
	1	1	Ongoing	CC PC PD
	2	2	Ongoing	CC PC PD

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Circulation				
D	2	3	As Requested by County	CC PC PD
	3	4	FY 1992-1995	CC PC PD PW
		5	Ongoing	PD
		6	FY 1992-1996	CC PC PD
	4	7	FY 1992-1994	CC PC PD PW
E	1	1	Ongoing	CC PC PD PW
	2,3	2	Ongoing	PD PW
	4	3	Ongoing	CC PC PD PW
		4	FY 1992-1993	CC PC PD PW
	5	5,6	Ongoing	PD PW
	6	7	FY 1992-1997	CC PC PW
	7	8,9	Ongoing	PD PW
Noise				
A	1,2	1	FY 1992	CC PC PD
		2	Ongoing	CC PC PD
	3	3	FY 1992	CC PC PD
		4	Ongoing	CC PC PD PW
	4,5	5,6	Ongoing	PD PW
	6, 11-14	7	FY 1992	CC PC
	7-9	8-10	Ongoing	CC PC PD PW
	10	11	Ongoing	PD PW

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Conservation and Open Space				
A	1	1	FY 1992-1994	CC PC PD
		2	Ongoing	CC PC PD
	2	3	FY 1992-1993	PD PW
	3,4	4,5	Ongoing	CC PC PD
	5	6	Ongoing	CC PC PD
	6	7	FY 1992-1994	CC PC PD
		8	Ongoing	PD
		9	Ongoing	PD
		10	Ongoing	PD
	7	11	FY 1992-1995	CC PC PD
B	1	1	FY 1992-1993	CC PC PD PW
	2	2	FY 1992-1997	CC PC PD
	3	3	FY 1992-1993	CC PC PD
	4	4	Ongoing	CC PC PD
	5	5,6	Ongoing	CC PC PD
C	1,7	1	As Requested by Agencies	CC PC PD
	2	2	Ongoing	CC PC PD
	3,4	3	FY 1992-1994	CC PC PD
	5,6	4	Ongoing	CC PC PW
	8	5	FY 1992-1993	CC PC PD

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Conservation and Open Space				
C	9	6	FY 1992	CC PC PD PW
D	1	1	Ongoing	PD
	2	2	FY 1993	CC PC PD
	3,4	3-6,8	Ongoing	CC PC PD PW
		7	FY 1993	PD
Public Health and Safety				
A,B,C,D	Incorporated by Reference from the Sonoma County General Plan. The City of Cloverdale shall work with the County to ensure implementation of the Goals and Policies as they pertain to the Cloverdale Study Area. Refer to Goal E, Policy 1 and Program 1.			
E	1	1	Ongoing	CC PC PD PW
	2	2	FY 1992-1994	PW FD
	3-5	3-5	Ongoing	CC PC PD PW FD PL
	6,7	5	Ongoing	CC PC PD FD
		6	FY 1992-1993	PW FD
		7	Ongoing	PD PL
		8	FY 1992	CC PC PD FD PL
		9	FY 1992	CC PC PD
	8	5,7	Ongoing	CC PC PD PW
	9	10	Ongoing	CC PC PD
	10	11	FY 1992-1993	CC PC PD PW
	11	12	FY 1994-1995	CC PC PD PW
	12	13,14	Ongoing	CC PC PD PW FD

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Public Health and Safety				
F	1	1	Ongoing	CC PC PD PW
	2	2	As Report is Available	CC PC PD
	3,4	3	Ongoing	CC PC PD PW
	5	4	Annual	CC PC PW
G	1	1 (Ordinance)	Ongoing FY 1992-1995	CC PC PD PW
	2	2	FY 1992	CC PC PD PW
		3	FY 1992-1993	CC PC PD PW
	3	4	FY 1993-1996	CC PC PD PW
		5	Ongoing	CC PC PD PW
		6	Ongoing	CC PC PD PW
	4	7	Ongoing	CC PC PD PW
	5	8	Ongoing	CC PC PD PW
		9	Ongoing	CC PC PD PW
		10	Ongoing	CC PC PD PW
		11	Ongoing	CC PC PD PW
Parklands and Recreation				
A	1	1-3	Ongoing	CC PC PD
	2,3	4,5	Ongoing	CC PC PD
B	1	1,2	FY 1992	CC PC PD

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Parklands and Recreation				
B	2	3-5	FY 1993-1994	CC PC PD
	3	6,7	FY 1993-1994	CC PC PD PW
	4	8-14	Ongoing	CC PC PD
	6	15-17	FY 1992-1995	CC PC PD
	7	18-21	FY 1992-1996	CC PC PD PW
	8	23-25	Ongoing	CC PC PD
Community Design				
A	1	1	Ongoing	CC PC PD
	2	2	Ongoing	CC PC PD
	3	3	Ongoing	CC PC PD
	4	4	Ongoing	CC PC PD
	5	5	FY 1992-1998	CC PC PD PW
	6	6	Ongoing	CC PC PD PW
		7	FY 1992-1994	CC PC PD PW
		8	Ongoing	CC PC PD
	8	9	FY 1992-1994	CC PC PD PW
		10	FY 1992	CC PC PD PW
		11	FY 1992-1994	CDA
		12	Ongoing	CDA
		13	FY 1992-1994	CDA
	9	14	FY 1992-1994	CC PC PD

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Community Design				
	9	15	FY 1992-1994	CC PC PD CDA
		16	FY 1992-1995	PD CDA
B	1	1	Ongoing	CC PC PD PW
	2,3	2	FY 1992-1994	CC PC PD
		3	FY 1994-1996	CC PC PD PW
		4	1992-1993	CDA
	4	5	1993-1996	CC PC PD CDA
	5	6-13	1992-1996	CC PC PD PW CDA
C	1	1	FY 1993-1995	CC PC PD
	2	2	Ongoing	CC PC PD
		3	FY 1993-1994	CC PC PD
		4	FY 1994-1996	CC PC PD
		5	FY 1994-1996	CC PC PD
		6	FY 1992-1993	CC PC PD
	3,4	7	Ongoing	CC PC PD
	5	8	Ongoing	CC PC PD
	6	9	Ongoing	CC PC PD
	7	10	FY 1992-1994	CC PC PD CDA
	8-10	11	Ongoing	CC PC PD
		12	FY 1992-1996	CC PC PD

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX A

RESPONSIBILITY CHART

GOAL	POLICY	PROGRAM	TIME FRAME	RESPONSIBILITY
Community Design				
D	1	1	FY 1992-1994	CC PC PD
	2-4	2	Ongoing	CC PC PD
		3	FY 1992-1994	CC PC PD
E	1	1	FY 1992-1994	CC PC PD
		2	Ongoing	CC PC PD
	2	3	FY 1992-1993	PD PW
	3,4	4,5	Ongoing	CC PC PD
	5	6	Ongoing	CC PC PD
	6	7	FY 1992-1994	CC PC PD
		8	Ongoing	PD
		9	Ongoing	PD
		10	Ongoing	PD
	7	11	FY 1992-1995	CC PC PD

Continued.

CC = City Council
 PC = Planning Commission
 CDA = Community Development Agency

PW = Public Works
 PD = Planning Department
 FD = Fire Department
 PL = Police Department

APPENDIX B

GENERAL PLAN REQUIREMENT
CHECKLIST/INDEX

GENERAL PLAN REQUIREMENT CHECKLIST/INDEX

REQUIREMENT	VOLUME	SECTION
LAND USE		
Proposed general distribution and location and extent of the uses of the land for:		
• housing	I, II, III	Land Use
• business	I, II, III	Land Use
• industry	I, II, III	Land Use
• open space	I, II, III	Land Use
• agriculture	I, II, III	Land Use
• natural resources	I, II, III	Land Use
• recreation	I, II, III	Land Use
• enjoyment of scenic beauty	I, II, III	Land Use
• education	I, II, III	Land Use
• public buildings and grounds	I, II, III	Land Use
• solid and liquid waste disposal	I, II, III	Land Use
• other categories of private and public	I, II, III	Land Use
Statement of standards of population density (people in a given area) and not d.u. per acre, unless the basis for correlation between the measure of d.u. per acre and the number of people is set forth explicitly in the plan (Twain Harte v. Tuolumne, 138 CA 3d 699)	I	Population
Statements of standards of building intensity	II	Land Use
Identify areas subject to flooding and review annually	I, II, III	Health and Safety
Timberland production	I	Biology
CIRCULATION		
General location and extent of:		
• existing and proposed major thoroughfares	I, II, III	Circulation
• transportation routes	I, II, III	Circulation
• terminals	I, II, III	Circulation
• other local public utilities and facilities	I, III	Public Services
HOUSING		
Previous Housing Element Evaluation	I	Housing
Assessment of housing needs and inventory of resources and constraints to meeting needs		
• analysis of population and employment trends	I	Housing
• documentation of projections	I	Housing

Continued.

**GENERAL PLAN REQUIREMENT
CHECKLIST/INDEX**

REQUIREMENT	VOLUME	SECTION
HOUSING continued		
• quantification of existing and projected housing needs for all income levels including share of regional housing need	I	Housing
• analysis and documentation of household characteristics including level of payment compared to ability to pay	I	Housing
• housing characteristics including overcrowding	I	Housing
• housing stock condition	I	Housing
• inventory of land suitable for residential development including vacant sites and redevelopment sites and analysis of relationship of zoning and public facilities and services to these sites	I	Housing
• analysis of potential and actual governmental constraints upon the maintenance, improvement or development of housing for all income levels, including land use controls, building codes, site improvements, fees and exactions and permit processing procedures	I	Housing
• analysis of special housing needs such as handicapped, elderly, large families, farmworkers, and families with female heads of household	I	Housing
• assisted rental housing at risk for conversion	I	Housing
• energy conservation opportunities	I	Housing
Statement of community goals, quantified objectives and policies relative to the maintenance, improvement and development of housing	II	Housing
A Program with a five year schedule of actions, including:		
• identify adequate sites which will be made available through zoning and development standards and public facilities; encourage development of a variety of housing types, including rentals, factory built, mobile homes, emergency shelters, and transitional housing	II	Housing
• assist in the development of housing to meet the needs of low and moderate income households	II	Housing
• address and remove government constraints	II	Housing
• conserve and improve conditions of existing affordable housing stock	II	Housing
• promote equal housing opportunities	II	Housing
• identification of agencies and officials responsible for implementation of actions and means through which consistency will be achieved with other Plan elements and community goals	II	Housing
• description of public participation program	I	Introduction, Housing
	III	Introduction

Continued.

GENERAL PLAN REQUIREMENT CHECKLIST/INDEX

REQUIREMENT	VOLUME	SECTION
NOISE		
Analyze and quantify current and projected noise levels for:		
• highways and freeways	I, III	Noise
• primary arterials and major local streets	I, III	Noise
• passenger and freight on-line rail and ground rapid transit	I, III	Noise
• commercial, general aviation, heliport, and military air operations	I, III	Noise
• local industries plants	I, III	Noise
• other ground stationary noise sources	I, III	Noise
Use CNEL or Ldn for contours	I, III	Noise
Noise contours shall be used as a guide to estimate a land use pattern that minimizes community exposure to excess noise	I, III	Noise
Implementation measures and possible solutions that address existing and foreeable noise problems	II	Noise
CONSERVATION AND OPEN SPACE		
Conservation, development, and utilization of natural resources including:		
• water and hydraulic forces	I, II, III	Health and Safety, Hydrology
• forests	I, III	Biology
• soils	I	Soils/Agricul.
	II	Conservation
	II	Geothermal
• rivers and other waters	I	Health and Safety
	I, III	Biology
	II	Conservation
	II	Geothermal
• harbors	N/A	
• fisheries	N/A	
• wildfires	I, III	Biology
	II	Conservation
• minerals	I	Minerals
	II	Conservation
Open space for the preservation of natural resources including but not limited to:		
• areas required for the preservation of plant and animal life including habitat for fish and wildlife	I, III	Biology
	II	Conservation
• areas required for ecological and other scientific study	II	Conservation

Continued.

GENERAL PLAN REQUIREMENT CHECKLIST/INDEX

REQUIREMENT	VOLUME	SECTION
CONSERVATION AND OPEN SPACE continued		
• rivers, streams, bays and estuaries	I, III	Health and Safety, Biology
	II	Safety, Conservation
• coastal beaches, lakeshores, banks of rivers and streams and watersheds	I, III	Health and Safety, Conservation
Open space used for the managed production of resources including but not limited to:		
• forest lands, rangeland, agricultural lands and areas of economic importance for the production of food and fiber	I	Soils/Agricul. Biology
	II	Conservation
• areas needed for recharge of groundwater basins	I	Biology
	II	Geothermal
• areas containing major mineral deposits including those which are in short supply	I, III	Minerals
	II	Geothermal
Open space for outdoor recreation		
• areas of outstanding historical/cultural value	I, III	Cultural
	II	Conservation
• areas particularly suited for park and recreation purposes including access to lakeshores, beaches, rivers, and streams	I	Recreation
	II	Open Space
• areas which serve as links between major recreation and open space reservations, including utility ease- ments, banks of rivers and streams, trails, and scenic highway corridors	I	Recreation
	II	Open Space
	I, II	Transportation
Open space for public health and safety:		
• areas requiring special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, watersheds, areas required for the protection and enhancement of air quality	I	Health and Safety, Biology, Air Quality

Continued.

**GENERAL PLAN REQUIREMENT
CHECKLIST/INDEX**

REQUIREMENT	VOLUME	SECTION
CONSERVATION AND OPEN SPACE continued	II	Safety, Conservation
Open Space Inventory	I, II	Land Use
Action Program	II	Open Space
PUBLIC HEALTH AND SAFETY		
Protection of the community from unreasonable risks associated with:		
• surface rupture	I, II, III	Health and Safety
• ground shaking	I, II, III	Health and Safety
• ground failure	I, II, III	Health and Safety
• tsunami	I, III	Health and Safety
• seiche	I, II, III	Health and Safety
• dam failure	I, II, III	Health and Safety
• slope stability	I, II, III	Health and Safety
• subsidence	I, II, III	Health and Safety
• other geologic hazards	I, II, III	Health and Safety
Flooding	I, II, III	Health and Safety
Wildland and urban fires	I, II, III	Health and Safety
Evacuation routes	II	Health and Safety
Peakload water supply rates	I, III	Public Services
	II	Circulation
Minimum road widths	I, II	Circulation
Clearance around structures	II	Safety
Geologic hazards mapping	I, III	Health and Safety

Continued.

GENERAL PLAN REQUIREMENT
CHECKLIST/INDEX

REQUIREMENT	VOLUME	SECTION
-------------	--------	---------

PARKLANDS AND RECREATION
COMMUNITY DESIGN ELEMENT

APPENDIX C
UNITS AT RISK FOR CONVERSION

Preparing Housing Element Analysis

The analysis and programs will be most effective if affected parties, e.g., tenants of the at-risk projects and local nonprofits, are involved in developing the analysis and programs. If there are many at-risk units in the jurisdiction, technical assistance providers may be helpful. This analysis could be conducted as part of a working task force which could continue to monitor the at-risk, or as part of an educational workshop series.

1. Define ten-year analysis period, and its two five-year subsets.
2. Identify projects with affordability controls, and determine potential conversion dates; compile information on those with conversion dates within the ten-year analysis period, by each five-year planning period.
3. Determine whether the owners of any projects with conversion dates within the next two years have filed "Notices of Intent" to change or terminate the project's affordability controls (local government should have received copy of notice).
4. Using the information gathered in steps 2 and 3, analyze the potential for loss of affordability controls on the units at risk during each five-year period.
5. Prepare cost estimates for preservation and replacement of units at-risk of conversion in each five-year planning period of the ten-year analysis period. Determine whether replacement or preservation of the at-risk units would be the more economical and viable alternative.
6. Ask local nonprofits and public entities whether they are capable and interested in acquiring and managing projects (maintaining affordability control) from the inventory if they were to become available for sale.
7. Analyze all potential funds for acquisition/rehabilitation of at-risk units in your inventory. Estimate the total of funds which could be available within the current five-year planning period.
8. Compare the estimated costs of preserving at-risk units with the estimate of funds available (#5 vs. #7).
9. Determine the quantified objective for at-risk units to be preserved (a subset of the housing element's quantified objective for affordable units to be conserved).
10. Develop programs, including the provision of any identified financial resources to preserve the units at risk in the first five-year planning period.
11. Notify affected parties of public hearing(s) prior to adoption of the housing element.

ASSISTED RENTAL HOUSING

Housing Element law requires an analysis of the potential conversion of assisted housing developments to non low-income housing uses during the next ten-year period. A general analysis is provided in the Housing Section of the Master Environmental Assessment (MEA). The following section provides more detailed analysis regarding assisted rental housing within the City of Cloverdale.

1. Ten-year period: 1990 to 2000.

Two five-year subsets: 1990 to 1995 and 1996 to 2000.

2. At-Risk development:

King's Valley Apartments
100 King's Circle
Cloverdale, CA 95425
A 99-unit Senior Housing Development

(Source: HUD MIDLIS and MIS databases, 1990)

Type of subsidy:

HUD Section 236 (J)(L)202 Interest Reduction Payment Program
HUD Section 8 on 45 Units Exp. 8/96
HUD Section 8 on 30 Units Exp. 6/93

(Source: HUD MIDLIS and MIS databases, 1990.)

3. No "Notice of Intent" to change or terminate the affordability controls has been submitted to the City of Cloverdale. The Lutheran Church is the current owner of the units and has no plans to convert them or let their subsidy lapse. (Source: Lois Reid, King's Valley Senior Apartments)
4. It is possible that Section 8 subsidies could be lost for 30 units in June 1993 and for 45 units in August 1996.
5. Units could be preserved (all 99 units) by purchasing the complex or extension of the subsidy. The King's Valley Apartment complex was last assessed at a value of \$2,310,850.00 (Source: Sonoma County Assessor's Office). The subsidy received is approximately \$85,000 per year. (Source: Ted Barcelon, Barcelon and Associates, July 19, 1991). The 75 apartments currently subsidized under Section 8 would cost approximately \$2.4 million¹ to construct in today's market. Preservation by purchase would be similar in cost to construction of new units. Preservation through extension of the subsidy would require approximately \$85,000 a year.

Table C-1 generally indicates the rent levels considered affordable for the City of Cloverdale. These are based on income limits.

¹ Calculated using the price of housing estimates per square foot found in Table T of the MEA, Volume 11 of the General Plan Update.

6. Burbank Construction is a non-profit corporation set up by the Sonoma County Housing Authority to build and acquire low income/assisted rental housing. Burbank Construction has used Federal, State, and Local funds to acquire at risk assisted rental housing. Burbank Construction is capable and interested in maintaining assisted rental units in Cloverdale (Source: Arnold Sternburg, July 18, 1991). ECHO and Habitat for Humanity are private non-profit organizations that have been known to build or rehabilitate low income housing in the County. No information is available regarding their resources.
7. The City of Cloverdale currently has approximately \$145,000 in Community Development Block Grants (CDBG) available to assist low income rental housing. The City also has approximately \$45,000 earmarked for low income housing from the 20 percent set aside of the tax value (Source: City of Cloverdale, Citizens Advisory Committee Meeting, May 23, 1991). The Redevelopment Plan has been in effect since 1987. The Sonoma County Housing Authority Administrative has fee reserves of approximately \$1.1 million (Source: Tino Vera, Sonoma County Housing Authority, July 19, 1991). Depending on the funding sources sought by the City as indicated in Housing Element programs, additional funds may become available.
8. Over \$2 million would be needed to preserve the 75 units through construction or purchase. To extend the subsidy, approximately \$85,000 per year would be needed. The City currently has \$190,000 of available housing funds.
9. Quantified Objective: 75 units
10. Programs have been identified in the Policy and Program document, specifically the Housing Element.
11. Public meetings and hearings throughout the General Plan process have been regularly noticed in newspapers and at City Hall including those meetings which have addressed housing. Topical articles have regularly appeared in local newspapers.

TABLE C-1
AFFORDABLE RENTS

INCOME GROUP	% OF MEDIAN INCOME	RENT
Under State Density		
Very Low	50%	\$503.75
Low	60%	\$604.50
HUD Categories		
Very Low	50%	\$503.75
Low Income	50%-80%	\$806.00
Moderate	80%-120%	\$1,209.00

Source: STA Planning, Inc.

Notes: Median income based on median Sonoma renter income of \$40,300 from the State of California Department of Housing and Community Development, "New Income Limits" (March 21, 1990).

APPENDIX D

NOISE ELEMENT REPORT
MESTRE GREVE ASSOCIATES

Noise Element of the General Plan
for the
City of Cloverdale

Prepared by

Fred Greve, P.E.

Mike Holritz

William Bloomer

Mestre Greve Associates

280 Newport Center Drive

Suite 230

Newport Beach, California 92660

Report # 90-242.B

May 30, 1991

Table of Contents

Noise Element

1.0 Introduction	1
2.0 Existing Conditions/Issue Analysis	3
3.0 Goal, Objectives, and Policies	16
4.0 Plan for Control and Management of Noise	18

Technical Appendix

- A. Glossary
- B. Noise Measurement Results

CITY OF CLOVERDALE NOISE ELEMENT

1.0 INTRODUCTION

1.1 OVERVIEW

1.1.1 Contents of Element

This Noise Element follows the recently revised State guidelines in the State Government code Section 653021(g) and Section 46050.1 of the Health and Safety Code. The Noise Element quantifies the community noise environment in terms of noise exposure contours for both near-term and long-term levels of growth and traffic activity. The information will become a guideline for the development of land use policies to achieve compatible land uses and provide baseline levels and noise source identification for local noise ordinance enforcement.

1.1.2 Key Issues

1. *Transportation Noise Control* - Within the City of Cloverdale are a number of transportation related noise sources including major arterials, collector roadways, a general aviation airport, and a railroad. These sources are the major contributors of noise in Cloverdale. Cost effective strategies to reduce their influence on the community noise environment are an essential part of the Noise Element.
2. *Community Noise Control for Non-Transportation Noise Sources* - Residential land uses and areas identified as noise sensitive must be protected from excessive noise from non-transportation sources including commercial and construction activities. These impacts are most effectively controlled through the adoption and application of a City Noise Ordinance.
3. *Noise and Land Use Planning Integration* - Information relative to the existing and future noise environment within Cloverdale City should be integrated into future land use planning decisions. The Element presents the noise environment in order that the City may include noise impact considerations in development programs. Noise and land use compatibility guidelines are presented, as well as noise standards for new developments.

1.2 PURPOSE

The Noise Element of a General Plan is a comprehensive program for including noise control in the planning process. It is a tool for local planners to use in achieving and maintaining compatible land use with environmental noise levels. The Noise Element identifies noise sensitive land uses and noise sources, and defines areas of noise impact for the purpose of developing programs to ensure that City of Cloverdale residents will be protected from excessive noise intrusion.

1.3 AUTHORIZATION

The State of California has mandated that each county and city prepare a Noise Element as part of its General Plan. Section 65302(g) of the California Government Code requires specifically:

"(g) A Noise Element shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:

Highways and freeways.

Primary arterials and major local streets.

Passenger and freight on-line railroad operations and ground rapid transit systems.

Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.

Local industrial plants, including, but not limited to, railroad classification yards.

Other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

Noise contours shall be shown for all of the sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (LDN). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6), inclusive. The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise. The Noise Element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state's noise insulation standards."

The State Guidelines for Preparation and Content of Noise Elements of the General Plan indicate that the Noise Element should present the noise environment in terms of noise contours. For those areas identified as containing noise sensitive facilities, the noise environment is determined by monitoring.

SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES IN INDOOR AND OUTDOOR ENVIRONMENTS
(A-Scale Weighted Sound Levels)

dB(A)	OVER-ALL LEVEL Sound Pressure Level Approx. 0.0002 Microbar	COMMUNITY (Outdoors)	HOME OR INDUSTRY	LOUDNESS Human Judgement of Different Sound Levels
130	UNCOMFORTABLY	Military Jet Aircraft Take-Off With After-burner From Aircraft Carrier @ 50 Ft. (130)	Oxygen Torch (121)	120 dB(A) 32 Times as Loud
120 110	LOUD	Turbo-Fan Aircraft @ Take Off Power @ 200 Ft. (90)	Riveting Machine (110) Rock-N-Roll Band (106-114)	110 dB(A) 16 Times as Loud
100	VERY	Jet Flyover @ 1000 Ft. (103) Boeing 707, DC-8 @ 6080 Ft. Before Landing (106) Bell J-2A Helicopter @ 100 Ft. (100)		100 dB(A) 8 Times as Loud
90	LOUD	Power Mower (96) Boeing 737, DC-9 @ 6080 Ft. Before Landing (97) Motorcycle @ 25 Ft. (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 20 Ft. (89) Prop. Airplane Flyover @ 1000 Ft. (88) Diesel Truck, 40 MPH @ 50 Ft. (84) Diesel Train, 45 MPH @ 100 Ft. (83)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	80 dB(A) 2 Times as Loud
70	MODERATELY LOUD	High Urban Ambient Sound (80) Passenger Car, 65 MPH @ 25 Ft. (77) Freeway @ 50 Ft. From Pavement Edge, 10:00 AM (76 + or - 6)	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Air Conditioning Unit @ 100 Ft. (60)	Cash Register @ 10 Ft. (65-70) Electric Typewriter @ 10 Ft. (64) Dishwasher (Rinse) @ 10 Ft. (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Ft. (50)		50 dB(A) 1/4 as Loud
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
	JUST AUDIBLE	(dB(A) Scale Interrupted)		
10	THRESHOLD OF HEARING			

SOURCE: Reproduced from Melville C. Branch and R. Dale Beland, Outdoor Noise in the Metropolitan Environment,
Published by the City of Los Angeles, 1970, p.2

2.0 EXISTING CONDITIONS/ISSUE ANALYSIS

2.1 DEFINITION OF NOISE

1. Noise Definitions Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the Decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud; and 20 dB higher four times as loud; and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). Examples of various sound levels in different environments are shown in Exhibit 1.

Noise has been defined as unwanted sound and it is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. These criteria are based on such known impacts of noise on people as hearing loss, speech interference, sleep interference, physiological responses and annoyance. Each of these potential noise impacts on people are briefly discussed in the following narratives:

HEARING LOSS is not a concern in community noise problems of this type. The potential for noise induced hearing loss is more commonly associated with occupational noise exposures in heavy industry or very noisy work environments. Noise levels in neighborhoods, even in very noisy airport environs, are not sufficiently loud to cause hearing loss.

SPEECH INTERFERENCE is one of the primary concerns in environmental noise problems. Normal conversational speech is in the range of 60 to 65 dBA, and any noise in this range or louder may interfere with speech. There are specific methods of describing speech interference as a function of distance between speaker and listener and voice level. Exhibit 2 shows the relationship between noise levels and speech interference.

SLEEP INTERFERENCE is a major noise concern because sleep is the most noise sensitive human activity. Sleep disturbance studies have identified interior noise levels that have the potential to cause sleep disturbance. Note that sleep disturbance does not necessarily mean awakening from sleep, but can refer to altering the pattern and stages of sleep.

PHYSIOLOGICAL RESPONSES are those measurable effects of noise on people which are realized as changes in pulse rate, blood pressure, etc. While such effects can be induced and observed, the extent is not known to which these physiological responses cause harm or are signs of harm.

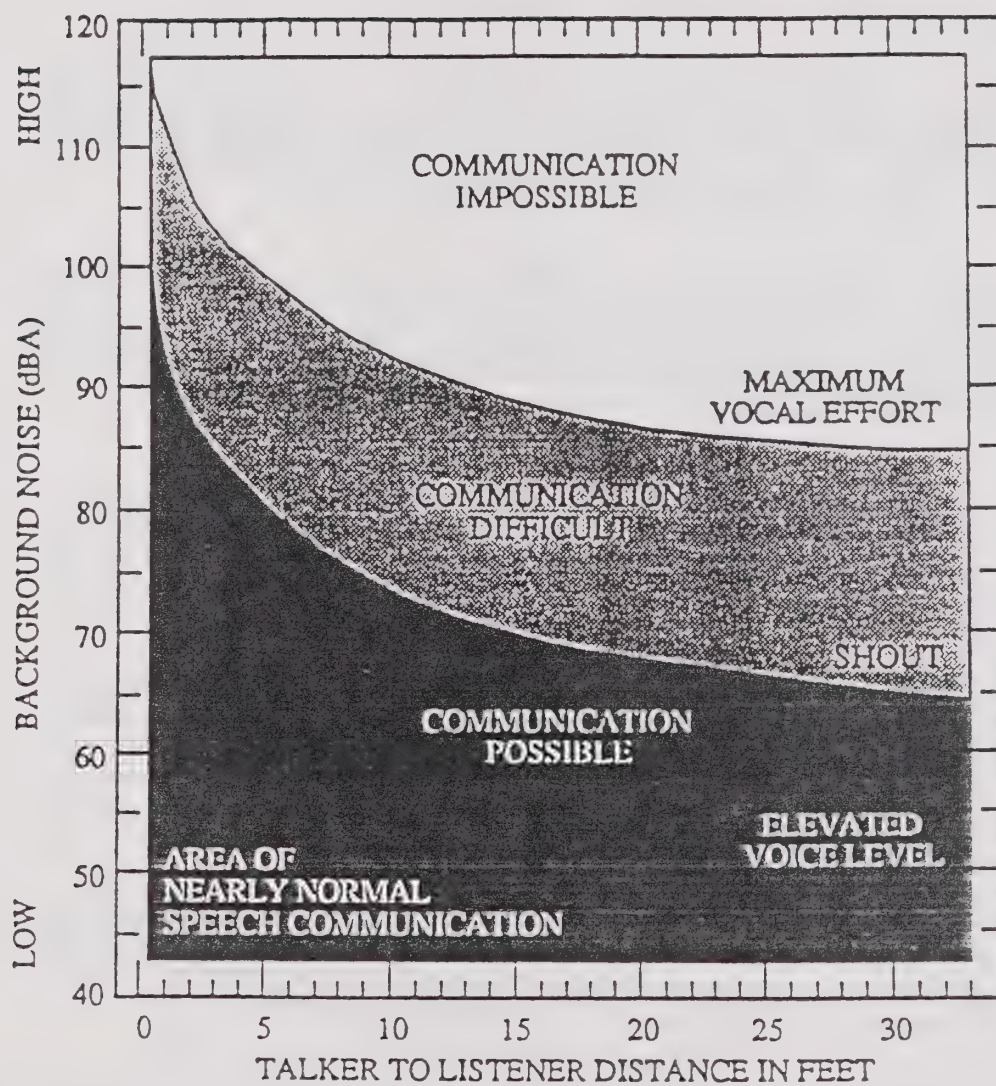


Exhibit 2
Effects of Noise on Speech Interference

ANNOYANCE is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability.

2.2.1 Standards

Community noise is generally not steady state and varies with time. Under conditions of fluctuating noise levels, some type of statistical metric is necessary in order to quantify noise exposure over a long period of time. Several rating scales have been developed for describing the effects of noise on people. They are designed to account for the above known effects of noise on people.

Based on these effects, the observation has been made that the potential for noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. These scales are the Equivalent Noise Level (LEQ), the Day Night Noise Level (LDN), and the Community Noise Equivalent Level (CNEL). These scales are described in the following paragraphs.

LEQ is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the "energy" average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for 15 minutes, 1 hour or 24 hours.

LDN is a 24-hour, time-weighted annual average noise level. Time-weighted refers to the fact that noise which occurs during certain sensitive time periods is penalized for occurring at these times. In the LDN scale, those events that take place during the night (10 pm to 7 am) are penalized by 10 dB. This penalty was selected to attempt to account for increased human sensitivity to noise during the quieter period of a day, where sleep is the most probable activity.

CNEL is similar to the LDN scale except that it includes an additional 5 dB penalty for events that occur during the evening (7pm to 10pm) time period. Either LDN or CNEL may be used to identify community noise impacts within the Noise Element. Examples of CNEL noise levels are presented in Exhibit 3.

The public reaction to different noise levels varies from community to community. Extensive research has been conducted on human responses to exposure of different levels of noise. Exhibit 4 relates LDN noise levels (approximately equal to CNEL noise levels) to community response from some of these surveys. Community noise standards are derived from tradeoffs between community response surveys, such as this, and economic considerations for achieving these levels.

Intermittent or occasional noise such as those associated with stationary noise sources is not of sufficient volume to exceed community noise standards that are based on a time averaged scale such as the LDN scale. To account for intermittent noise, another method to characterize noise is the Percent Noise Level (L%). The Percent Noise Level is the level exceeded X% of the time during the measurement period. Examples of various noise environments in terms of the Percent Noise Levels are shown in Exhibit 5.

CNEL

Outdoor Location

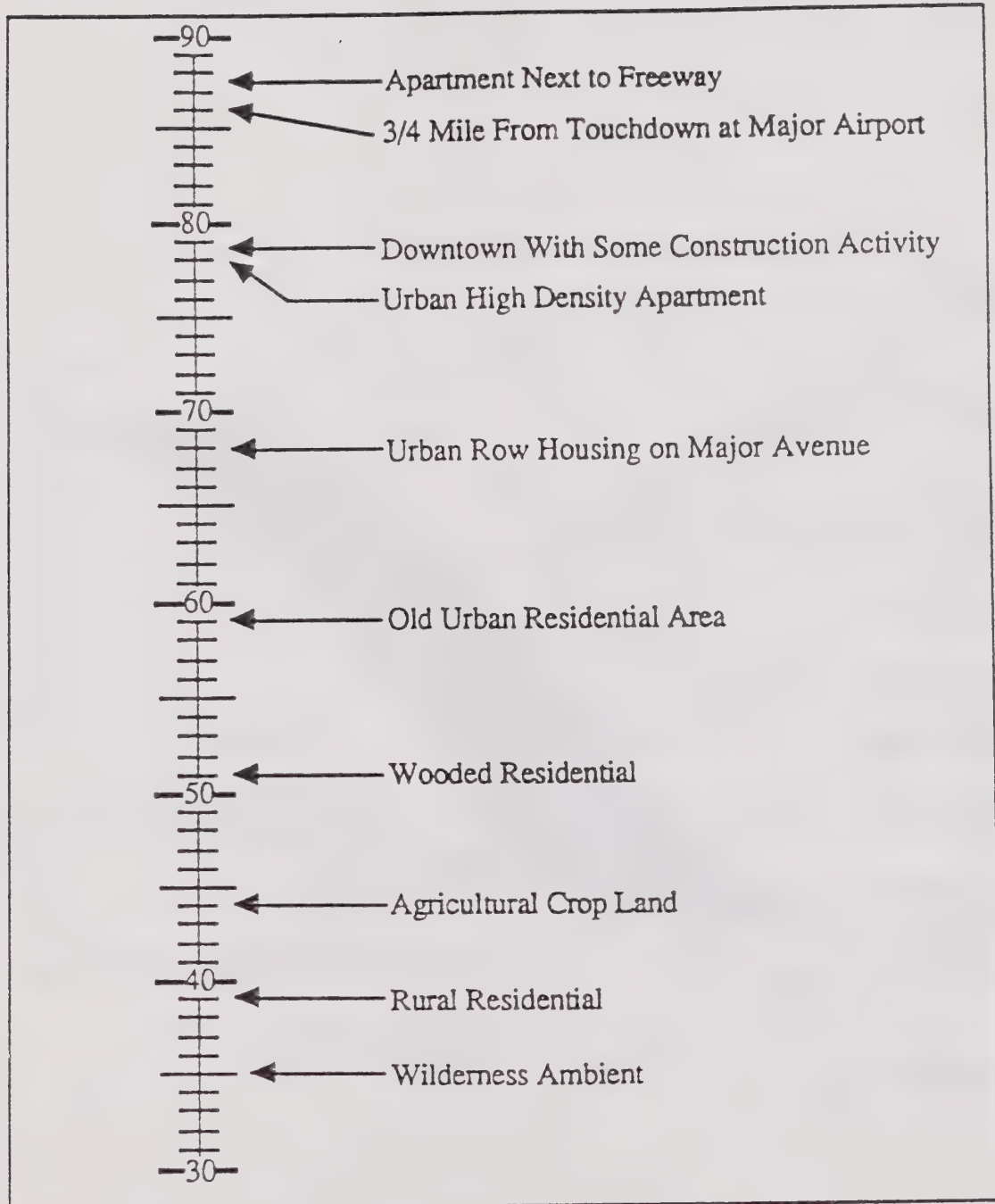


Exhibit 3

Typical Outdoor Noise Levels

COMMUNITY REACTION

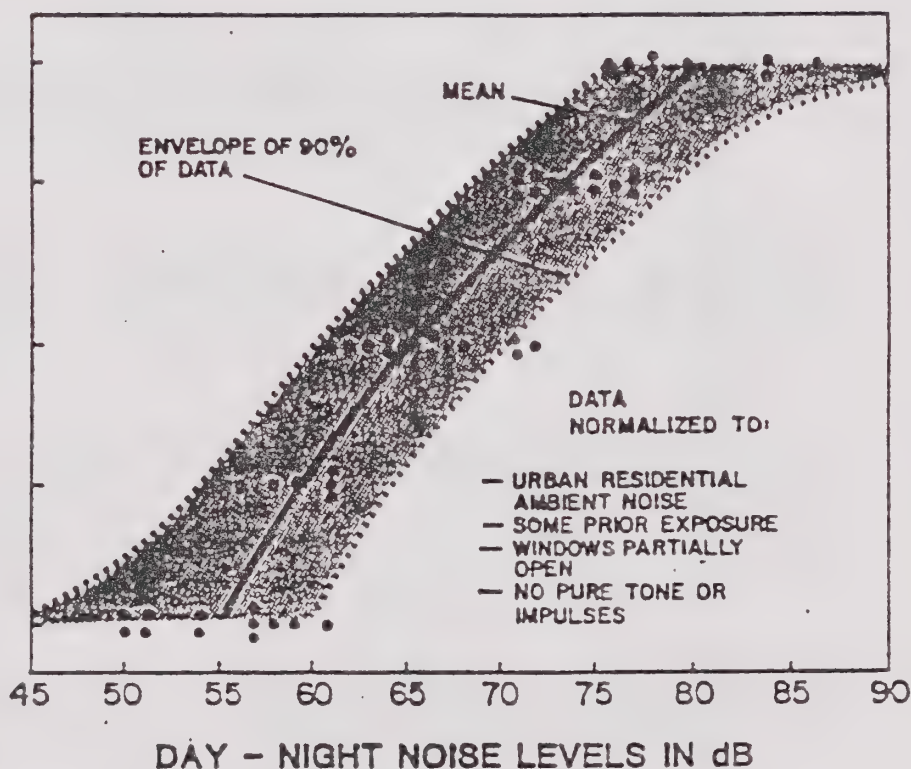
VIGOROUS
COMMUNITY
ACTION

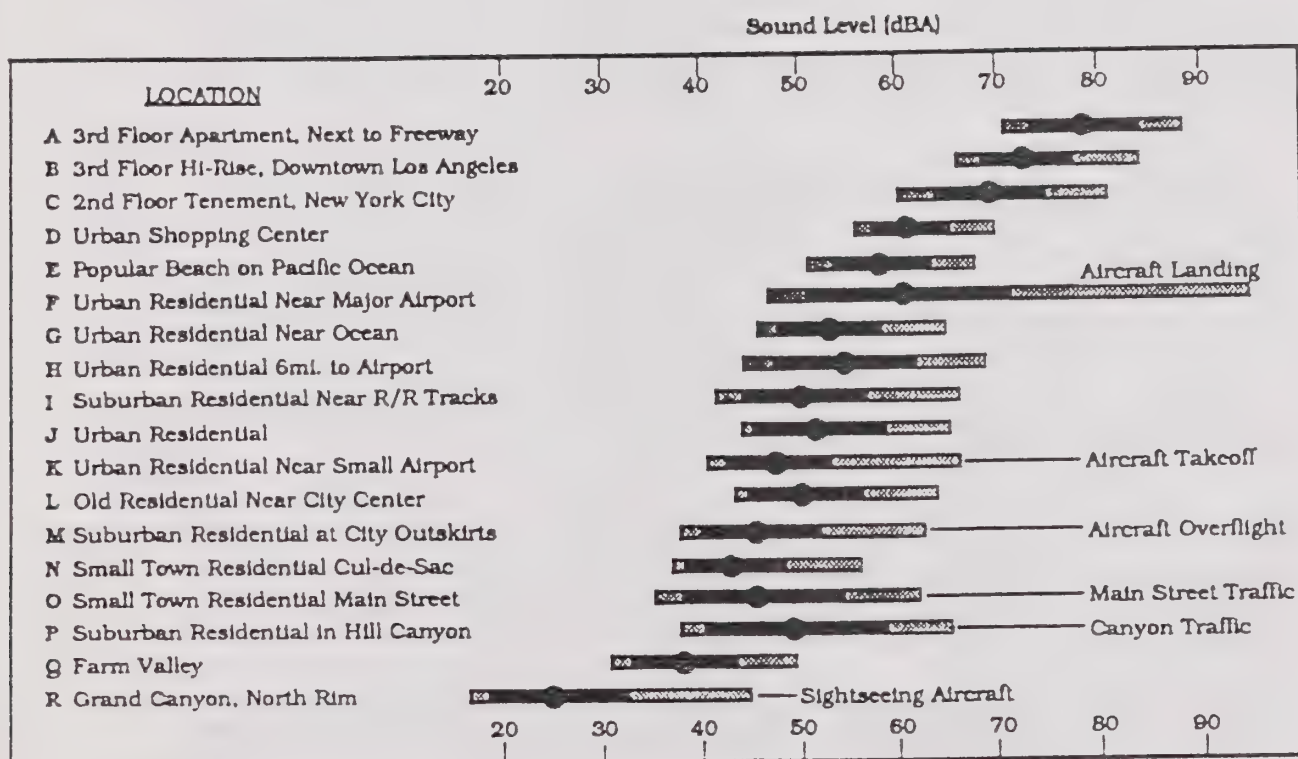
SEVERAL
THREATS
OF LEGAL
ACTION, OR
STRONG
APPEALS
TO LOCAL
OFFICIALS TO
STOP NOISE

WIDESPREAD
COMPLAINTS
OR SINGLE
THREAT OF
LEGAL ACTION

SPORADIC
COMPLAINTS

NO REACTION,
ALTHOUGH
NOISE IS
GENERALLY
NOTICEABLE





SOURCE: Community Noise, EPA, 1971

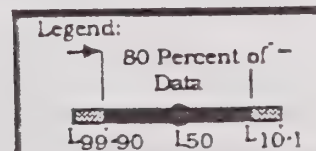


Exhibit 5

Daytime Outdoor Noise Levels

Noise Ordinances are typically specified in terms of the percent noise levels. Ordinances are designed to protect people from non-transportation related noise sources such as music, machinery and vehicular traffic on private property. Noise Ordinances do not apply to motor vehicle noise on public streets or other transportation related noise sources that are preempted by the State or Federal government.

Noise/Land Use Compatibility Guidelines The purpose of this section is to present information regarding the compatibility of various land uses with environmental noise. It is from these guidelines and standards, that the City of Cloverdale Noise Criteria and Standards have been developed. Noise/Land use guidelines have been produced by a number of Federal and State agencies including the Federal Highway Administration, the Environmental Protection Agency, the Department of Housing and Urban Development, the American National Standards Institute, and the State of California. These guidelines, presented in the following paragraphs, are all based upon cumulative noise criteria such as LEQ, LDN or CNEL.

The ENVIRONMENTAL PROTECTION AGENCY published in March 1974 a very important document entitled "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety" (EPA 550/9-74-004). Exhibit 6 presents a table of land uses and requisite noise levels. In this table, 55 LDN is described as the requisite level with an adequate margin of safety for areas with outdoor uses, this includes residences, and recreational areas. The EPA "levels document" does not constitute a standard, specification, or regulation, but identifies safe levels of environmental noise exposure without consideration for economic cost for achieving these levels.

The FEDERAL HIGHWAY ADMINISTRATION (FHWA) has adopted and published noise abatement criteria for highway construction projects. The noise abatement criteria specified by the FHWA are presented in Exhibit 7 in terms of the maximum one hour Noise Equivalent Level (LEQ). The FHWA noise abatement criteria basically establishes an exterior noise goal for residential land uses of 67 LEQ and an interior goal for residences of 52 LEQ. The noise abatement criteria applies to private yard areas and assumes that typical wood frame homes with windows open provide 10 dB noise reduction (outdoor to indoor) and 20 dB noise reduction with windows closed.

The STATE OF CALIFORNIA requires each City and County to adopt Noise Elements of their General Plans. Such Noise Elements must contain a Noise/Land Use compatibility matrix. A recommended (but not mandatory) matrix is presented in the "Guidelines for the Preparation and Content of Noise Elements of the General Plan," (Office of Noise Control, California Department of Health, February 1976). Exhibit 8 presents this recommended matrix.

The CITY OF CLOVERDALE Noise Element of the General Plan contains recommended exterior noise levels for various types of land uses. Recognition of the adopted community noise levels implies that acoustical analysis may be required in areas where the standard is or may be exceeded, and that structural modifications for new development (more insulation, building orientation, etc.) may be necessary. The noise levels are presented as guidelines (as shown in Table 1) to be used to determine which proposed developments may require noise mitigation measures. The City recommends that interior sound levels not exceed 45 dB for residential structures. The City does not have any indoor noise standards for other building uses.

	Measure	Indoor Activity Interference	Hearing Loss Consideration	To Protect Against Both Effects (b)	Outdoor Activity Interference	Hearing Loss Consideration	To Protect Against Both Effects (b)
Residential with Outside Space and Farm Residences	Ldn Leq(24)	45	70	45	55	70	55
Residential with No Outside Space	Ldn Leq(24)	45	70	45			
Commercial	Leq(24)	(a)	70	70(c)	(a)	70	70(c)
Inside Transportation	Leq(24)	(a)	70	(a)			
Industrial	Leq(24)(d)	(a)	70	70(c)	(a)	70	70(c)
Hospitals	Ldn Leq(24)	45	70	45	55	70	55
Educational	Ldn Leq(24)	45	70	45	55	70	55
Recreational Areas	Leq(24)	(a)	70	70(c)	(a)	70	70(c)
Farm Land and General Unpopulated Land	Leq(24)				(a)	70	70(c)

Code:

- Since different types of activities appear to be associated with different levels, identification of a maximum level for activity interference may be difficult except in those circumstances where speech communication is a critical activity.
- Based on lowest level.
- Based only on hearing loss.
- An Leq(8) of 75 dB may be identified in these situations so long as the exposure over the remaining 16 hours p day is low enough to result in a negligible contribution to the 24-hour average, i.e., no greater than an Leq of 6 dB.

Note: Explanation of identified level for hearing loss: The exposure period which results in hearing loss at the identified level is a period of 40 years.

* Refers to energy rather than arithmetic averages.

SOURCE : EPA

ACTIVITY CATEGORY	DESIGN NOISE LEVEL - LEQ	DESCRIPTION OF ACTIVITY CATEGORY
A	57 (Exterior)	Tracts of land in which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of open spaces, or historic districts which are dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas and parks which are not included in category A and residences, motels, hotels, public meeting rooms, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Category A or B above.
D	-	For requirements of undeveloped lands see FHWA PPM 773.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Land Use Category	Community Noise Exposure Ldn or CNEL, dB					
	55	60	65	70	75	80
Residential - Low Density Single Family, Duplex, Mobile Homes						
Residential - Multiple Family						
Transient Lodging - Motels, Hotels						
Schools, Libraries, Churches Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheatres						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Residential						
Industrial, Manufacturing Utilities Agriculture						

Interpretation



Normally Acceptable

Specified Land Use is Satisfactory, Based Upon the Assumption that Any Buildings Involved are of Normal Conventional Construction, Without Any Special Noise Insulation Requirements.



Conditionally Acceptable

New Construction or Development Should be Undertaken Only After a Detailed Analysis of the Noise Reduction Requirement is Made and Needed Noise Insulation Features Included in the Design. Conventional Construction, but with Closed Windows and Fresh Air Supply Systems or Air Conditioning, Will Normally Suffice.



Normally Unacceptable

New Construction or Development Should Generally be Discouraged. If New Construction or Development Does Proceed, a Detailed Analysis of the Noise Reduction Requirements Must be Made and Needed Noise Insulation Features Included in the Design.



Clearly Unacceptable

New Construction or Development Should Generally not be Undertaken.

Exhibit 8

California Land Use/Noise Guidelines

Table 1
PERMISSIBLE EXTERIOR NOISE LEVELS

LAND USE	MAXIMUM L _{dn} dBA	OPTIMUM L _{dn} dBA
Residential	65	45-55*
Institutional	65	55
Recreation	70	60
Office-Professional	75	65
General Commercial/Industrial	80	70

* Single Family (45); Multi-family (55).

2.2.2 Methods of Measurement

The noise environment in Cloverdale was modeled using a comprehensive noise measurement survey of existing noise sources and incorporating these results into computer noise models (it is, of course, impossible to measure future noise levels so we must rely on computer noise models for future noise estimates.) The noise environment is commonly presented graphically in terms of lines of equal noise levels, or contours. The following paragraphs detail the methodology used in the above.

Measurement Procedure. Nine sites were selected for measurement of the noise environment in Cloverdale. A review of noise complaints and identification of major noise sources in the community provided the initial base for development of the community noise survey. The measurement locations were selected on the basis of proximity to major noise sources and noise sensitivity of the land use. The measurement locations are depicted in Exhibit 9.

The Cloverdale Noise Element measurement survey utilized the Brüel & Kjær 2231 automated digital noise data acquisition system for short-term (10 min.) LEQ readings. This instrument automatically calculates both the Equivalent Noise Level (LEQ) and Percent Noise Level (L%) for any specific time period. The noise monitor was equipped with a Brüel & Kjær 1/2 inch electret microphone and was calibrated with a Brüel & Kjær calibrator with calibrations traceable to the National Bureau of Standards. Calibration for the calibrators are certified through the duration of the measurements by Brüel & Kjær. This measurement system satisfies the ANSI (American National Standards Institute) Standards 1.4 for Type 1 precision noise measurement instrumentation.

Based upon the identification of the major noise sources and the location of sensitive receptors, a noise measurement survey was conducted. The function of the survey is threefold. The first is to determine the existing noise levels at noise sensitive land uses. The second function is to provide empirical data for the correlation and calibration of the computer noise modeled environment. A third important aspect of the survey is to obtain an accurate description of the ambient noise levels in various communities throughout the City. Ambient traffic noise measurements at each site were designed to provide a "snapshot" indication of the traffic noise at the measurement sight. (The noise contours based on the CNEL noise scale are perhaps a

better indicator of the traffic noise at a given location.) The ambient traffic noise measurements were also used to provide an indication as to the validity of the FHWA traffic noise model used for the CNEL noise projections.

Noise contours for all the major noise sources in Cloverdale were developed based upon future traffic conditions. These contours were determined from the traffic levels for these sources. The contours are expressed in terms of the Community Noise Equivalent Level (CNEL.) The existing conditions scenario is derived from Cloverdale General Plan.

2.3 EXISTING ACOUSTIC ENVIRONMENT

This section contains a detailed description of the current noise environment within the City. This description of the noise environment is based on an identification of noise sources and noise sensitive land uses, a community noise measurement survey, and noise contour maps.

To define the noise exposure, this section of the report first identifies the major sources of noise in the community. The sources of noise in Cloverdale include: Highway 101/Cloverdale Boulevard, other arterial roadways, and the Northwestern Pacific Railroad. To completely assess the noise environment in the City, noise sensitive receptors must also be identified. As mandated by the State, noise sensitive receptors include, but are not limited to, residential areas, areas containing schools, hospitals, rest homes, long-term medical or mental care facilities, or any other land use areas deemed noise sensitive by the local jurisdiction.

2.3.1 Noise Sources and Levels

The predominant land use in the City is residential, and should also be considered the most noise sensitive. Other noise sensitive land uses include schools and parks. Maintenance of a relatively quiet ambience is important to maintaining the overall atmosphere of the area.

The majority of noise in Cloverdale originates from motor vehicles. Some major arterial roadways pass through the City. The main roadway of concern is Highway 101/Cloverdale Boulevard. Highway 101/Cloverdale Boulevard is the most significant noise source in Cloverdale. Other roadways in the City do not have sufficient traffic volumes to generate significant noise impacts.

The noise environment for Cloverdale can be described using noise contours developed for the major noise sources within the City. The major noise source impacting the City is traffic noise. Existing and future noise contour maps have been developed for the City as part of this element.

The traffic noise contours for existing conditions are presented in Exhibit 10. (This map is available for review at the City at 1" = 800' scale.) The 70 CNEL, 65 CNEL and 60 CNEL contours are shown on the map. The noise contours are also presented in tabular format in Table 4. These traffic noise levels were computed using the Highway Noise Model published by the Federal Highway Administration ("FHWA Highway Traffic Noise Prediction Model," FHWA-RD-77-108, December 1978). The FHWA Model uses traffic volume, vehicle mix, vehicle speed, and roadway geometry to compute the LEQ noise level. A computer code has been written which computes equivalent noise levels for each of the time periods used in CNEL. Weighting these noise levels and summing them results in the CNEL for the traffic projections used. The traffic volumes used to project these noise levels was derived from the "Master Environmental Assessment Transportation/Circulation Section for the City of Cloverdale", prepared by TJKM Transportation Consultants in January of 1991. The traffic mix and time distribution for Highway 101/Cloverdale Boulevard are presented in Table 2.

This traffic mix data was taken from the "1988 Annual Average Daily Truck Traffic on the California State Highway System" prepared by the U.S. Department of Transportation in August of 1989.

Table 2
TRAFFIC DISTRIBUTION PER TIME OF DAY
IN PERCENT OF ADT FOR HIGHWAYS

VEHICLE TYPE	PERCENT OF ADT		
	DAY	EVENING	NIGHT
Automobile	65.52	10.08	8.40
Medium Truck	3.43	0.53	0.44
Heavy Truck	9.05	1.39	1.16

The traffic distribution used in the arterial roadway CNEL calculations are presented below in Table 3. These traffic distribution estimates are based upon traffic surveys, and are considered typical for residential roadways in California.

Table 3
TRAFFIC DISTRIBUTION PER TIME OF DAY
IN PERCENT OF ADT FOR ARTERIALS

VEHICLE TYPE	PERCENT OF ADT		
	DAY	EVENING	NIGHT
Automobile	75.51	12.57	9.34
Medium Truck	1.56	0.09	0.19
Heavy Truck	0.64	0.02	0.08

Based on the noise levels shown in Table 4 it appears that 65 CNEL for outdoor living areas and 45 CNEL for indoor areas is a reasonable noise standard for new developments, and a reasonable long term goal for existing residential areas. According to Table 4 below, the only identifiable noise impacts in the City of Cloverdale are those associated with the existing Highway 101/Cloverdale Boulevard, where there is some degree of land use conflict associated with the excessive noise levels along this corridor. The noise levels along the corridor may exceed 70 CNEL if less than 120 feet from the centerline of the corridor. Areas along Highway 128 and First Street experience noise levels less than 65 CNEL. The remaining portions of the City experience noise levels generally less than 60 CNEL. The values given in Table 4 do not account for the effect of any noise barriers or topography that may affect ambient noise levels.

Table 4
EXISTING (1989) TRAFFIC NOISE CONTOURS

Roadway	ADT	SPEED MPH	Distance to CNEL Contour (feet)		
			70 CNEL	65 CNEL	60 CNEL
I-101/CLOVERDALE BOULEVARD					
North of I-128	11,600	55	79	169	365
South of I-128	13,500	55	87	187	404
North of 1st Street	18,600	55	108	232	500
South of 1st Street	20,400	55	115	247	532
North of Hot Spring Rd.	20,000	55	113	244	525
South of Hot Spring Rd.	18,300	55	107	230	494
I-128					
West of Cloverdale Blvd.	2,300	55	RW	RW	73
1ST STREET					
West of Cloverdale Blvd.	2,000	45	RW	RW	66
East of Cloverdale Blvd.	4,600	45	RW	RW	115
West of Crocker Rd.	3,100	45	RW	RW	89

RW - Contour falls inside the roadway right-of-way

ADT - Average Daily Traffic

2.3.2 Railroad Noise

Railroad operations within the Cloverdale General Plan Area are confined to the activities of the Northwestern Pacific Railroad (N.W.P.R.R.) Company which owns and operates approximately 9,600 feet of linear track along the eastern flank of the City. A number of residences in the vicinity of Railroad Avenue/Mulberry Street/First Street may experience intermittent excessive exterior noise levels. The "Assessment of Noise Environments Around Railroad Operations," (Wyle Laboratories Report WCR-73-5, July 1973) was used to model the train noise levels on the project site. The noise generated by a train pass-by can be divided into two components; that generated by the engine or locomotive, and that due to the railroad cars. The characteristic frequency of the engine is different than that for the cars. The effective radiating frequency is 1000 Hz for the locomotive engines, and 2000 Hz for the portion of the noise generated by the cars. The noise generated by the engine is the result of the mechanical movements of the engine parts, the combustion process, the horn if used, and to a lesser extent the exhaust system. The noise generated by the cars is a result of the interaction between the wheels and the railroad tracks. A zero source height is used for the car noise, and a source height of 10 feet above the track is utilized for the locomotive. The train noise levels are calculated by summing the noise generated by the locomotive and the noise generated by the cars.

Data on railroad operations were obtained from Mr. Jim Huffman at the Northwestern Pacific Railroad office (September 18, 1990). The railroad line is used for freight train operations only. Two freight train operations per day typically pass through the City. One train travels north between 10 p.m. and 11 p.m., and one travels south at approximately 11 p.m. The trains are not rigidly scheduled, although there are no train operations in the daytime period. The freight trains have an average of 25 cars and operate at speeds between 30 and 40 miles per hour. It was

anticipated by the Operations Officer that in the near future, the operations of the freight train going through the City are to remain the same. Table 5 shows the time distribution of the trains.

Table 5
 TRAIN TIME DISTRIBUTION

TIME PERIOD	----NUMBER OF TRAINS---- FREIGHT
Day	0
Evening	0
Night	2

The operational data was utilized in conjunction with the Wyle Model to project future and future train noise levels on the project site. The results of the train noise projections are displayed in Table 6 in terms of the 60, 65 and 70 CNEL noise levels at the distances from the centerline of the tracks. The noise projections do not include the effects of topography or barriers which may reduce the noise levels.

Table 6
 RAILROAD NOISE LEVELS

Train Type	Distance to CNEL Contour From Centerline of Railway (Feet)		
	70 CNEL	65 CNEL	60 CNEL
Freight train	33	115	247

The results in Table 6 indicate that the area adjacent to the Northwestern Pacific railroad tracks are exposed to noise levels greater than 65 CNEL. It is estimated that the 65 CNEL noise contour along the existing railroad alignment extends approximately 115 feet on either side of the track. The 60 CNEL noise contour is estimated to be approximately 247 feet from the track. Those existing residences along the railroad tracks may experience intermittent excessive train noise levels during the nighttime hours (typically around 10 p.m. and 11 p.m.). The 60 and 65 CNEL railroad noise contours are also shown on the map in Exhibit 10.

2.3.3 Existing Aircraft Noise Levels

The Cloverdale Municipal Airport is located in the extreme southeast corner of the City. This airport operates commercial aircrafts ranging from single and twin engine general aviation aircraft to business jets. The airport's overflight impacts are concentrated along the typical or median traffic pattern flight tracks. With the traffic pattern located only on the east side of the airport, the resulting impacts on the west side are minimal.

The 1988 aircraft noise contours for the Cloverdale Municipal Airport are shown in Exhibit 11. The contours are taken from the Cloverdale Municipal Airport Master Plan Report, October 1988. The contours indicate that the aircraft noise levels are minimal and occur only in those areas closest to the airport. The existing aircraft noise levels around the airport vicinity are approximately 55 CNEL. Therefore, aircraft noise is not a significant concern.

2.3.4 Noise Sensitive Land Uses

The most noise sensitive land use in Cloverdale is residential development. It is considered especially noise sensitive because (1) considerable time is spent by individuals at home, (2) significant activities occur outdoors, and (3) sleep disturbance is most likely to occur in a residential area. Additionally, the City of Cloverdale has a number of public and private educational facilities, churches, and parks that are considered noise sensitive. These facilities are generally located in the center of the City.

Noise contours represent lines of equal noise exposure, just as the contour lines on a topographic map are lines of equal elevation. The contour lines shown on the map are the 60 and 65 CNEL traffic noise and railroad noise contours. The noise contours presented should be used as a guide for land use planning. The 60 CNEL contour defines the Noise Referral Zone. This is the noise level for which noise considerations should be included when making land use policy decisions. The 65 CNEL contour describes the areas for which new noise sensitive developments will be permitted only if appropriate mitigation measures are included such that the standards contained in this Noise Element are achieved.



Exhibit 9
Noise Measurement Locations

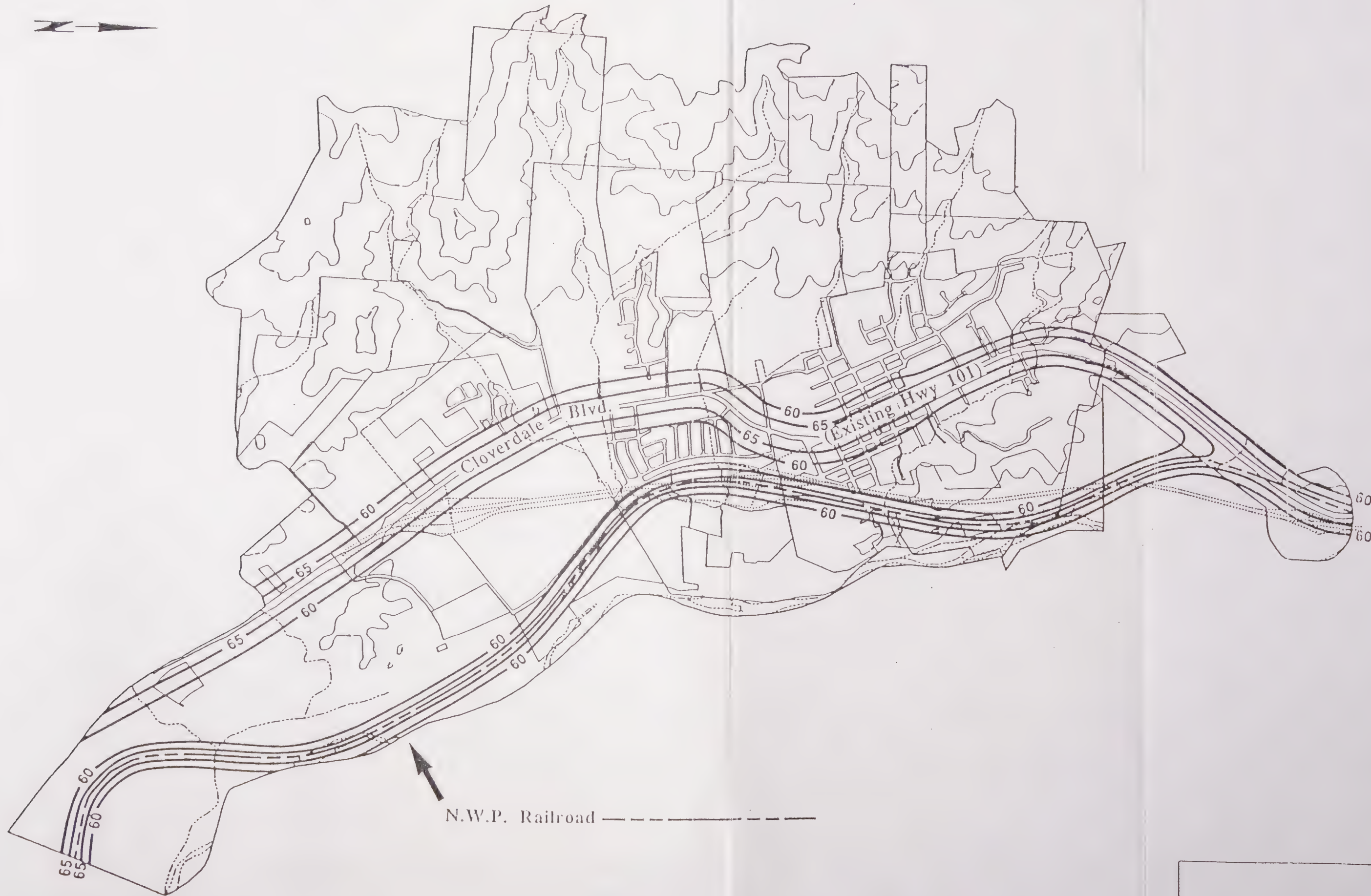


Exhibit 10
Existing CNEL Noise Contours

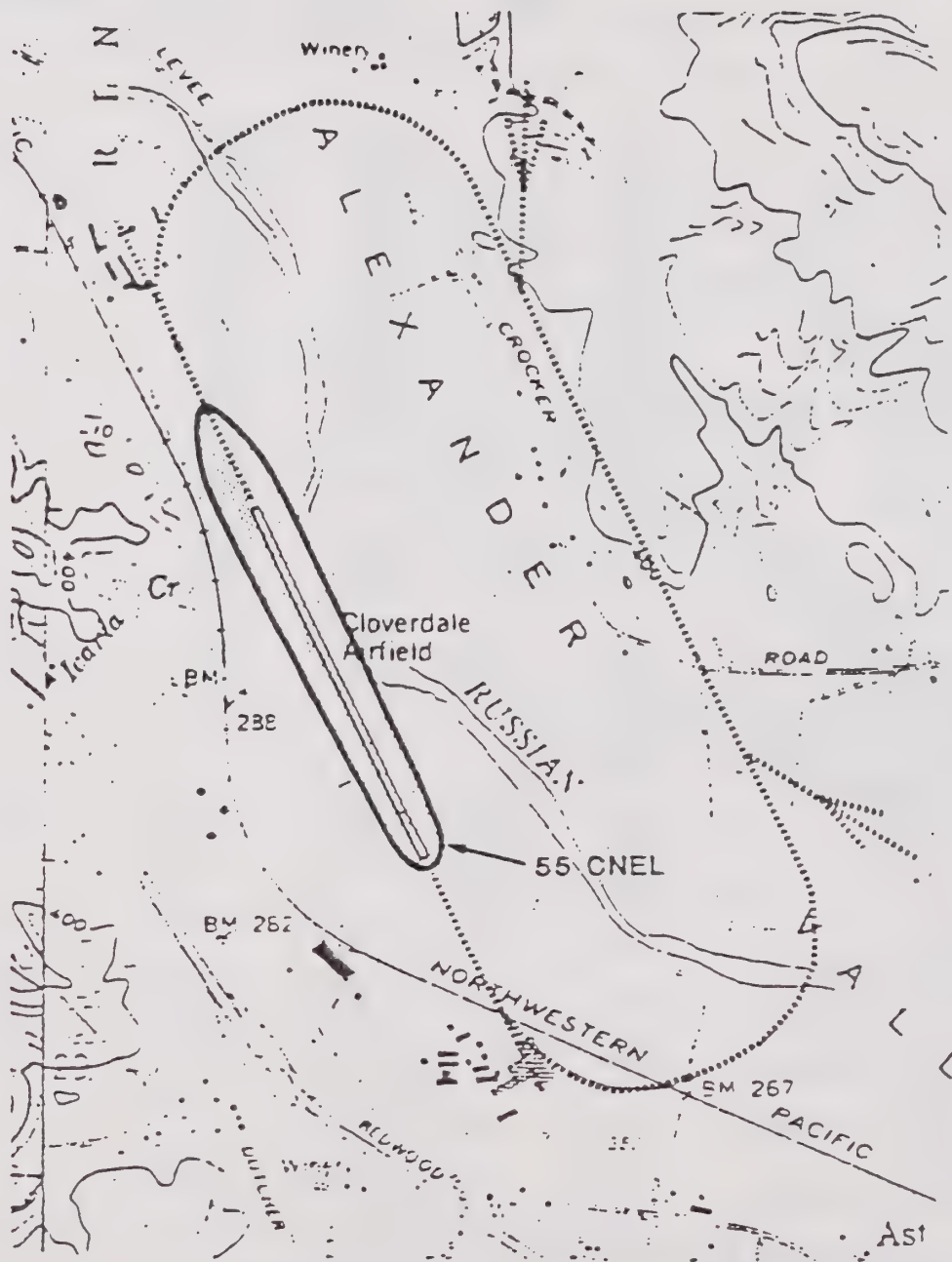


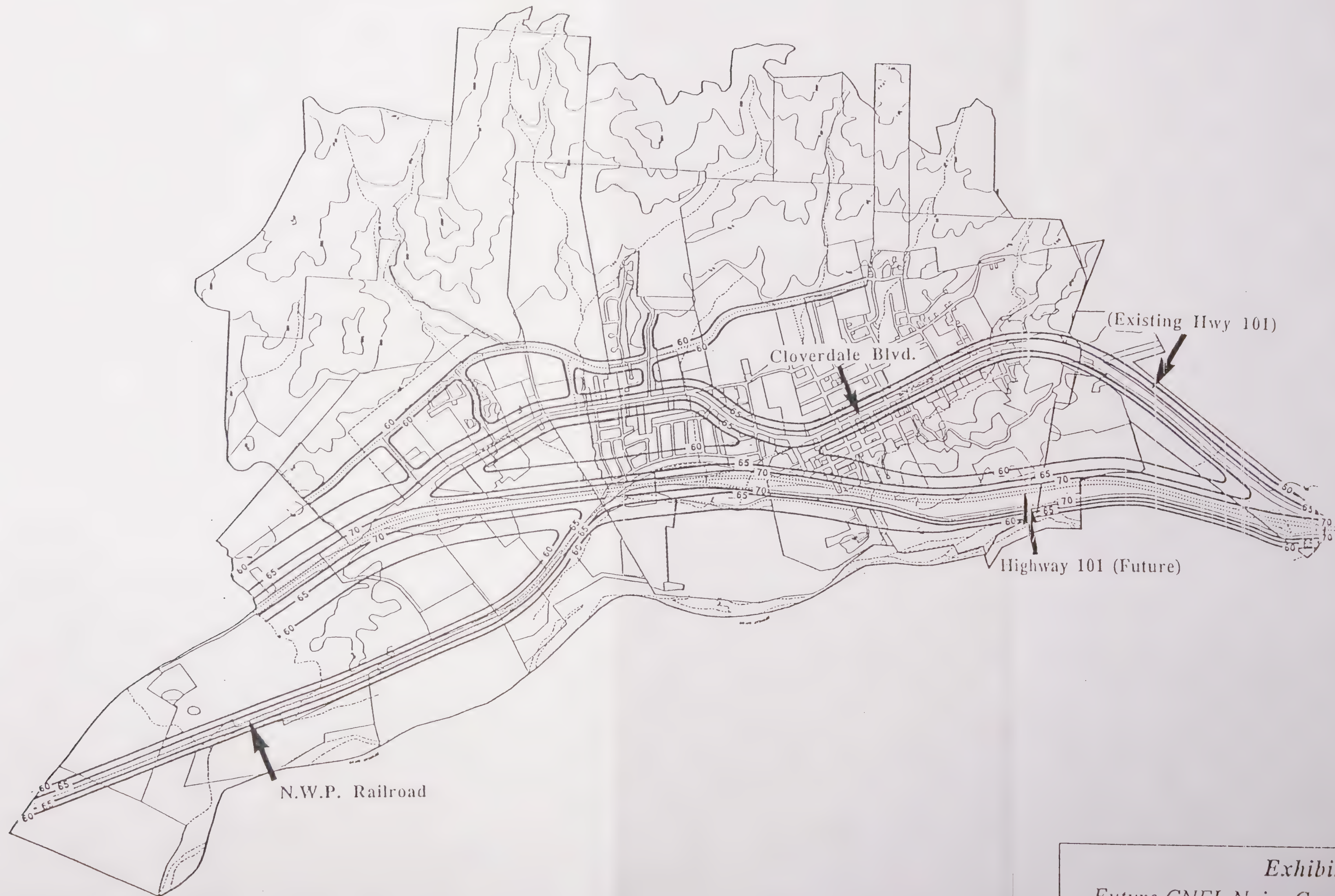
Exhibit II
Aircraft CNEL Noise Contour (1988)

Table 7 (Continued)

FUTURE GENERAL PLAN BUILDOUT TRAFFIC NOISE CONTOURS

Roadway	ADT	SPEED MPH	Distance to CNEL Contour (feet)		
			70 CNEL	65 CNEL	60 CNEL
FOOTHILL BLVD.					
North of 1st Street	2,700	40	RW	RW	50
1st Street to South St.	5,500	40	RW	RW	80
South St. to Cherry Creek	6,000	40	RW	RW	85
Cherry Creek to Unk. 1	10,800	40	RW	58	126
Unk. 1 to Hot Springs Rd.	6,000	40	RW	RW	85
Hot Springs to Elbridge	6,000	40	RW	RW	85
Elbridge to Treadway	6,000	40	RW	RW	85
S. of Treadway	7,400	40	RW	RW	98
Treadway to 101 (Middle)	3,400	40	RW	RW	58
North of 101	2,000	40	RW	RW	RW
GEYSER ROAD					
East of I-101	400	40	RW	RW	RW
1ST STREET					
Foothill to Cloverdale	2,800	45	RW	RW	62
Cloverdale to I-101	3,200	45	RW	RW	68
RIVER ROAD					
East of 101	2,400	35	RW	RW	RW
West of Crocker	400	35	RW	RW	RW
SOUTH ST. EXTENSION					
East of 101	1,600	35	RW	RW	RW
CHERRY CREEK ROAD					
East of 101	300	35	RW	RW	RW
East of 101	6,800	35	RW	RW	74
East of 101	11,000	35	RW	RW	102
UN-NAMED #1					
East of 101	5,200	35	RW	RW	62
HOT SPRINGS ROAD					
Far W. of Foothill	600	35	RW	RW	RW
W. of Foothill	1,400	35	RW	RW	RW
Foothill to Cloverdale	1,200	35	RW	RW	RW
ELBRIDGE					
Foothill to Cloverdale	5,100	35	RW	RW	61
TREADWAY					
Foothill to Cloverdale	7,000	35	RW	RW	75

RW - Contour falls inside the roadway right-of-way
 ADT - Average Daily Traffic



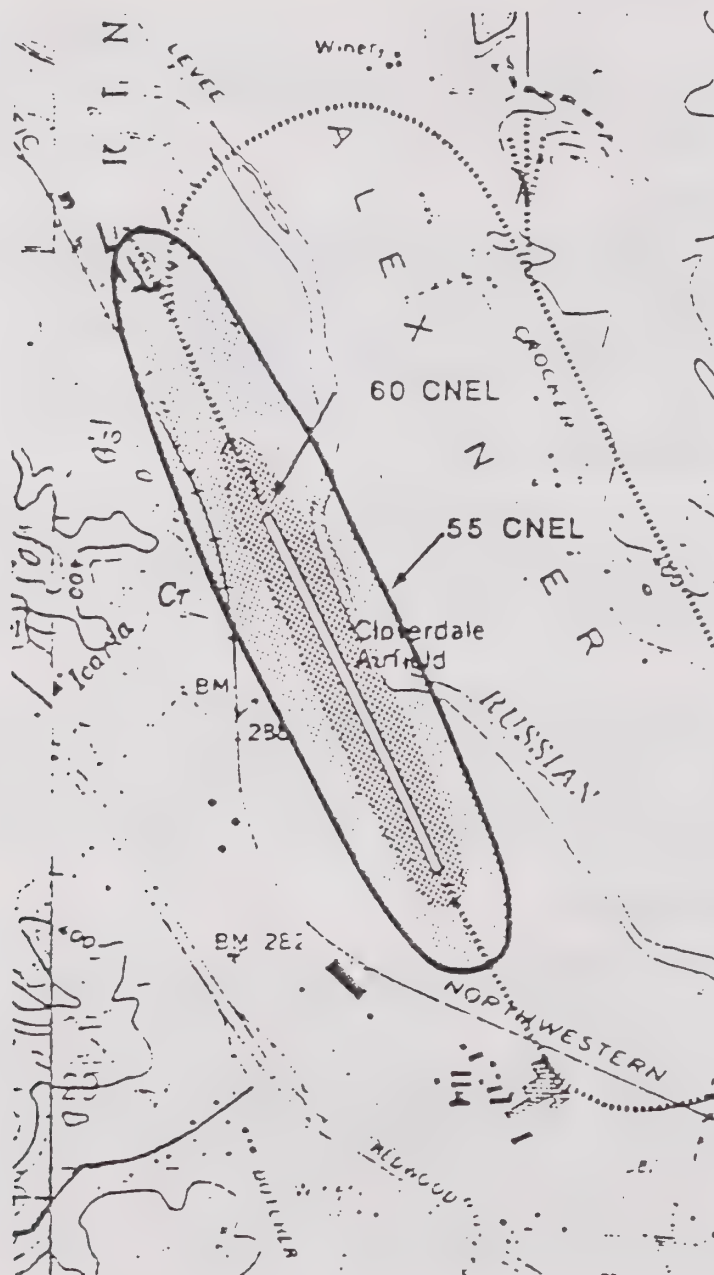


Exhibit 13
Aircraft CNEL Noise Contours (2008)

discernible is likely to be some value greater than 1 dBA, and 3 dBA appears to be appropriate for most people.

Table 8 indicates that the area along Highway 128 north of Cloverdale will experience noise levels increases greater than 3 dB; however, this area is zoned for conservation features (open-space) and is not considered a sensitive receptor area.

2.4.3 Railroad Noise

Train noise levels will not change significantly since future train operations are not expected to differ from current operations. According to the Corporate Communications Department of the Southern Pacific Transportation, future train operations will consist of the two freight trains per night as described previously in Table 5. Future train noise contours are shown in Exhibit 12.

2.4.4 Future Aircraft Noise Levels

Increased aircraft operations will result in higher noise levels from the Cloverdale Municipal Airport. The future airport noise contours are shown in Exhibit 13. The airport's overflight impacts will continue to be concentrated along the typical or median traffic pattern flight tracks. The noise impacts on the west side of the airport will remain minimal due to the east side flight pattern.

The aircraft noise contours (year 2008) for the Cloverdale Municipal Airport are shown in Exhibit 13. The contours are taken from the Cloverdale Municipal Airport Master Plan Report, October 1988. Exhibit 13 shows that future aircraft noise levels will be minimal and occur only in those areas closest to the airport. The future aircraft noise levels around the airport vicinity will range from 55 to 60 CNEL. Therefore, aircraft noise is not a significant concern.

2.4.5 Mitigation Measures

The noise sources in Cloverdale consist mainly of transportation related noise. A local government has little direct control of transportation noise at the source. State and Federal agencies have the responsibility to control the noise from the source, such as vehicle noise emission levels. The most effective method the City has to mitigate transportation noise is through reducing the impact of the noise onto the community (i.e. noise barriers and site design review). Mitigation through the design and construction of a noise barrier (wall, berm, or combination wall/berm) is the most common way of alleviating traffic noise impacts (Exhibit 14). The effect of a noise barrier is critically dependent on the geometry between the noise source and the receiver. A noise barrier effect occurs when the "line of sight" between the source and receiver is penetrated by the barrier. The greater the penetration the greater the noise reduction.

Another common approach to mitigating noise impacts is through the use of setbacks which prevent the "walled in" look. The setback approach simply requires that the homes or noise sensitive uses be setback away from the roadway at a distance great enough so that they are outside the noise impact zone. The setback area is landscaped. The landscaping actually provides very little noise reduction, however, residents seem to become less aware of the noise probably because they can not see or have an obstructed view of the road.

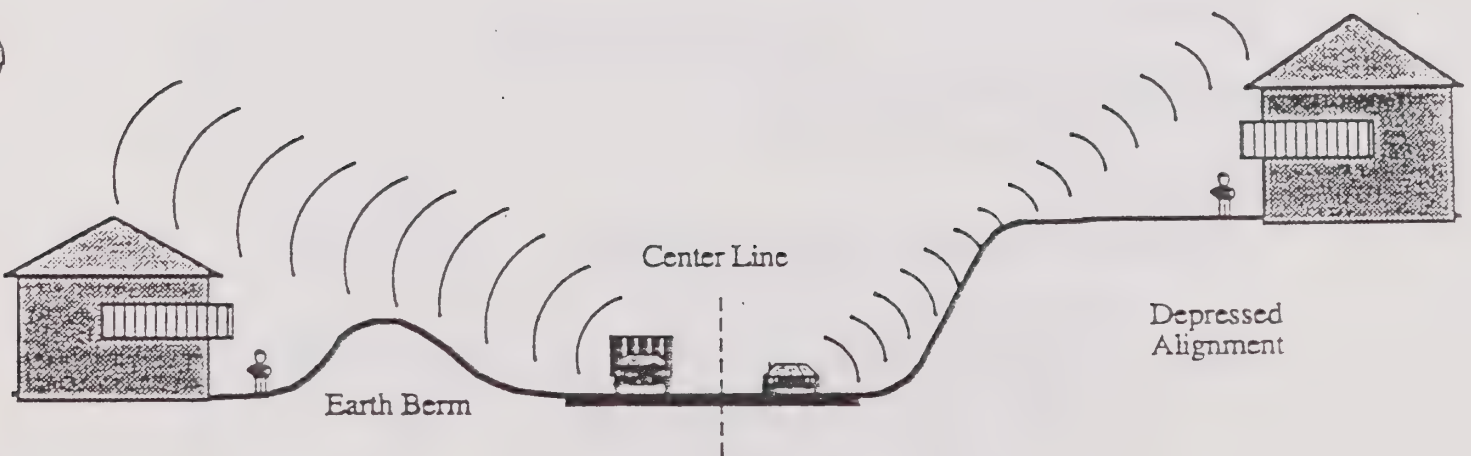
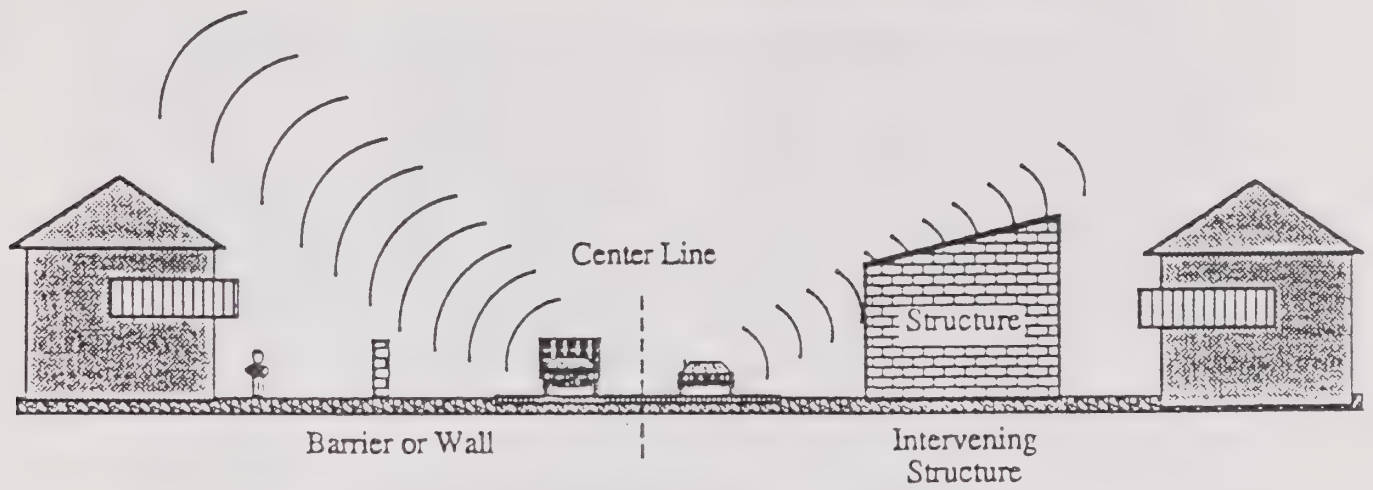


Exhibit 14
Examples of Noise Barrier Effects

2.4.6 Noise/Land Use Compatibility

Noise concerns should be incorporated into land use planning to reduce future noise and land use incompatibilities. This is achieved by establishing standards and criteria that specify acceptable limits of noise for various land uses throughout the City. These criteria are designed to integrate noise considerations into land use planning to prevent noise/land use conflicts. Exhibit 15 presents criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the basis for the development of specific Noise Standards. The proposed standards, presented in Exhibit 16, represent (if adopted) City policies related to land uses and acceptable noise levels. These tables are the primary tools which allow the City to ensure integrated planning for compatibility between land uses and outdoor noise. The most effective method to control community noise impacts from non-transportation noise sources is through application of a Community Noise Ordinance.

3.0 GOALS, OBJECTIVES, AND POLICIES

The following are statements of the goals of the City of Cloverdale for the control of community noise.

*TO PROTECT PUBLIC HEALTH AND WELFARE BY ELIMINATING
EXISTING NOISE PROBLEMS AND BY PREVENTING SIGNIFICANT
DEGRADATION OF THE FUTURE ACOUSTIC ENVIRONMENT.*

3.1 POLICIES

In order to achieve the goals of the Noise Element the following policies should be considered by the City of Cloverdale:

Objective 1.0

Incorporate noise considerations into land use planning decisions.

Policy 1.a Establish acceptable limits of noise for various land uses throughout the community. The City adopts the noise standards presented in Exhibit 16 which identify interior and exterior noise standards in relation to specific land uses; particularly residential areas, schools, hospitals, open space preserves, and parks. The standards would specify the maximum noise levels allowable for new developments and impacted by transportation noise sources operating on public or quasi-public property. (Sources on private property would be subject to the noise ordinance requirements, as called out in Policy 3.a.)

Policy 1.b The City shall require a noise impact evaluation for all projects as part of the design review process to determine if unacceptable noise levels will be created or experienced. Should noise abatement be necessary, the City shall require the implementation of mitigation measures based on a detailed technical study prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California with a minimum of three years experience in acoustics).

LAND USE CATEGORIES		COMMUNITY NOISE EQUIVALENT LEVEL CNEL						
CATEGORIES	USES	≤55	60	65	70	75	80	85
RESIDENTIAL	Single Family, Duplex, Multiple Family	A	A	B	B	C	D	D
RESIDENTIAL	Mobile Home	A	A	B	C	C	D	D
COMMERCIAL Regional, District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
COMMERCIAL Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
COMMERCIAL INDUSTRIAL INSTITUTIONAL	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
COMMERCIAL Recreation INSTITUTIONAL Civic Center	Amphitheatre, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
COMMERCIAL Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
COMMERCIAL General, Special INDUSTRIAL, INSTITUTIONAL	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
INSTITUTIONAL General	Hospital, Church, Library Schools' Classroom	A	A	B	C	C	D	D
OPEN SPACE	Parks	A	A	A	B	C	D	D
OPEN SPACE	Golf Course, Cemetery, Nature Centers Wildlife Reserve, Wildlife Habitat	A	A	A	A	B	C	C
AGRICULTURE	Agriculture	A	A	A	A	A	A	A

INTERPRETATION

ZONE A CLEARLY COMPATIBLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

ZONE B NORMALLY COMPATIBLE

New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

ZONE C NORMALLY INCOMPATIBLE

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

ZONE D CLEARLY INCOMPATIBLE

New construction or development should generally not be undertaken.

- * Construction of new residential uses will not be allowed in the 65 CNEL for airport noise.

Exhibit 15 Noise/Land Use Compatibility Matrix

LAND USE CATEGORIES		ENERGY AVERAGE CNEL	
CATEGORIES	USES	INTERIOR ¹	EXTERIOR ²
RESIDENTIAL	Single Family, Duplex, Multiple Family	45 ³	65
	Mobile Home	—	65 ⁴
COMMERCIAL INDUSTRIAL INSTITUTIONAL	Hotel, Motel, Transient Lodging	45	65 ⁵
	Commercial Retail, Bank, Restaurant	55	—
	Office Building, Research and Development, Professional Offices, City Office Building	50	—
	Amphitheatre, Concert Hall, Auditorium, Meeting Hall	45	—
	Gymnasium (Multipurpose)	50	—
	Sports Club	55	—
	Manufacturing, Warehousing, Wholesale, Utilities	65	—
	Movie Theatres	45	—
INSTITUTIONAL	Hospital, Schools' classroom	45	65
	Church, Library	45	—
OPEN SPACE	Parks	—	65

INTERPRETATION

- Indoor environment excluding: Bathrooms, toilets, closets, corridors.
- Outdoor environment limited to: Private yard of single family
Multi-family private patio or balcony which is served by a means of exit from inside.
Mobile home Park
Hospital patio
Park's picnic area
School's playground
Hotel and motel recreation area
- Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
- Exterior noise level should be such that interior noise level will not exceed 45 CNEL.
- Except those areas affected by aircraft noise.

AIRPORT/LAND USE NOISE COMPATIBILITY CRITERIA

LAND USE CATEGORY	DNL or Lon. CEA				
	50-55	55-60	60-65	65-70	70-75
<u>Residential</u>					
rural (less than 1 d.u./ac)	+	0	-	—	—
urban - low density (1-4 d.u./ac)	+	0	-	—	—
urban - medium to high density (more than 4 d.u./ac), transient lodging	++	-	0	-	—
mobile home parks	+	-	-	—	—
<u>Public</u>					
schools, libraries, hospitals, nursing homes	+	0	-	-	—
churches, auditoriums, concert halls	+	0	0	-	—
transportation, parking, cemeteries	++	++	—	+	0
<u>Commercial and Industrial</u>					
offices, retail trade	++	+	0	0	-
service commercial, wholesale trade, warehousing, light industrial	++	++	+	0	0
general manufacturing, utilities, extractive industry	++	++	+	+	+
<u>Agricultural and Recreational</u>					
cropland	++	++	++	+	+
livestock breeding	++	+	0	0	+
parks, playgrounds, zoos	++	+	+	0	+
golf courses, riding stables, water recreation	++	++	+	0	0
outdoor spectator sports	++	+	+	0	+
amphitheaters	+	0	-	—	—

LAND USE ACCEPTABILITY

INTERPRETATION/CONDITIONS

— Clearly Acceptable

The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.

+ Normally Acceptable

Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.

0 Marginally Acceptable

The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable on the conditions that outdoor activities are minimal and construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.

- Marginally Unacceptable

Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.

— Clearly Unacceptable

Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.

RECOMMENDED MAXIMUM INTERIOR NOISE LEVEL CRITERIA FOR INTERMITTENT NOISE

<u>Generalized Land Use (Occupancy)</u>		<u>Maximum Int Intermittent Noise - dBA</u>	<u>Basis for Criteria</u>
A.	RESIDENTIAL - SINGLE AND TWO FAMILY DWELLINGS		
	1. Living Areas		
	a. Daytime	50	Conversation - 5 ft. - normal voice
	b. Nighttime	55	Conversation - 10 ft. - normal voice
	2. Sleeping areas	50	Sleeping
B.	RESIDENTIAL Multiple Family Apartments	Same as A	Same as A
C.	EDUCATIONAL FACILITIES, ETC.		
	1. Concert Hall	25	Intrusion of noise may spoil artistic effect
	2. Legitimate Theater	30	Intrusion of noise may spoil artistic effect
	3. School Auditorium	35	Minimize intrusion into artistic performance
	4. School classroom	55	Speech communication - 20 ft. - raised voice
	5. School Laboratory	60	Speech communication - 8 ft. - normal voice
	6. Church Sanctuaries	45	Speech communication - 50 ft. - raised voice
	7. Library	55	Speech communication - 3 ft. - normal voice
D.	RECREATIONAL FACILITIES		
	1. Motion Picture Theater	45	Minimize intrusion into artistic performance
	2. Sports Arena	75	Conversation - 2 ft. - raised voice
	3. Bowling Alley	75	Conversation - 2 ft. - raised voice
E.	COMMERCIAL MISCELLANEOUS		
	1. Hotel, Motel Sleeping	50	Sleeping
	2. Hospital Sleeping	50	Sleeping
	3. - Executive Offices, Conf. Rooms	55	Speech communication - 12 ft. - normal voice
	4. Staff Offices	60	Speech communication - 8 ft. - normal voice
	5. Sales, Secretarial	65	Satisfactory telephone use
	6. Restaurants	65	Conversation - 4 ft. - normal voice
	7. Markets, Retail Stores	65	Conversation - 4 ft. - normal voice
F.	LIGHT INDUSTRIAL		
	1. Office Areas	See E-3, 4, 5	See E-3, 4, 5
	2. Laboratory	60	Speech Communication - 8 ft. - normal voice
	3. Machine Shop	75	Speech Communication - 3 ft. - raised voice
	4. Assembly, Construction	75	Speech Communication - 2 ft. - raised voice
G.	HEAVY INDUSTRIAL		
	1. Office Areas	See E-3, 4, 5	See E-3, 4, 5
	2. Machine Shop	75	Speech Communication - 3 ft. - raised voice
	3. Assembly, Construction	75	Speech Communication - 2 ft. - raised voice

Policy 1.c The City shall not approve projects that do not comply with the adopted standards.

Policy 1.d The City shall consider establishing a periodic noise monitoring program to identify progress in achieving noise abatement objectives and to perform necessary updating of the noise element and community noise standards. The California Department of Health Services recommends that noise elements be updated every 5 years.

Policy 1.e The City shall minimize potential transportation noise through proper design of street circulation, coordination of routing, and other traffic control measures.

Objective 2.0

Establish measures to reduce noise impacts from traffic noise sources.

Policy 2.a The City shall require the construction of barriers to mitigate sound emissions where necessary or where feasible. Action Items 1, 4, 5 and 6 provide specific measures for meeting this objective.

Policy 2.b The City shall require the inclusion of noise mitigation measures in the design of new roadway projects in Cloverdale. This would include but not be limited to the Southwest and Southeast Bypass roads currently under consideration.

Policy 2.c The City shall ensure the effective enforcement of City, State and Federal noise levels by all appropriate City divisions.

Policy 2.d The City shall actively advocate motor vehicle noise control requirements for production and sale.

Objective 3.0

Establish measures to control non-transportation noise impacts.

Policy 3.a The City shall establish new Community Noise Ordinance to mitigate noise conflicts between adjacent land uses. The Noise Ordinance establishes noise limits that can not be exceeded at the property line. The Noise Ordinance because it is a City statute can only control noise generated on private property. Therefore, the primary function of the Noise Ordinance is to control stationary noise sources and construction noise.

Policy 3.b Evaluate noise generated by construction activities, and subject them to the requirements of the Noise Ordinance.

Policy 3.c Establish and maintain coordination among the City agencies involved in noise abatement.

Policy 3.d The City shall ensure the effective enforcement of City, State, and Federal noise levels by all appropriate City divisions. The City shall provide quick response to complaints and rapid abatement of noise nuisances with the scope of the City's police powers.

Policy 3.e The City shall establish noise guidelines for City purchasing policy to take advantage of federal regulations and labeling requirements.

Policy 3.f The City shall coordinate with the California Occupational Safety and Health Administration (Cal-OSHA) to provide information on and enforcement of occupational noise requirements within the City.

4.0 THE PLAN FOR CONTROL AND MANAGEMENT OF NOISE

In order to achieve the goals and objectives of the Noise Element, an effective implementation program developed within the constraints of the City's financial and staffing capabilities is necessary. The underlying purpose is to reduce the number of people exposed to excessive noise and to minimize the future effect of noise in the City. The following are the actions that the City should consider implementing to control the impacts of noise in Cloverdale.

Issue 1 - Transportation Noise Control - The most efficient and effective means of controlling noise from transportation systems is reducing noise at the source. However, since the City has little direct control over source noise levels because of State and Federal preemption (i.e. State Motor Vehicle Noise Standards), policies should be focused on reducing the impact of the noise on the community. Cooperative efforts with State and Federal offices are essential.

Action 1 Encourage the use of walls and berms in the design of residential or other noise sensitive land uses that are adjacent to major roads, commercial, or industrial areas.

Action 2 Provide for continued evaluation of truck movements and routes in the City to provide effective separation from residential or other noise sensitive land uses.

- Action 3** Encourage the enforcement of State Motor Vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Cloverdale Police Department.

Issue 2 - Noise and Land Use Planning Integration. Community noise considerations are to be incorporated into land use planning. These measures are intended to prevent future noise and land-use incompatibilities.

- Action 4** Establish standards that specify acceptable limits of noise for various land uses throughout the City. These criteria are designed to fully integrate noise considerations into land use planning to prevent new noise/land use conflicts. Exhibit 15 shows criteria used to assess the compatibility of proposed land uses with the noise environment. These criteria are the bases for the development of specific Noise Standards. These standards, presented in Exhibit 16, define the City policies related to land uses and acceptable noise levels. These tables are the primary tools which allow the City to ensure noise integrated planning for compatibility between land uses and outdoor noise.
- Action 5** Incorporate noise reduction features during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses. The noise referral zones identified in Exhibits 10 and 12 (areas exposed to noise levels of at least 60 CNEL) can be used to identify locations of potential conflict. New developments will be permitted only if appropriate mitigation measures are included such that the standards contained in this Element or adopted ordinance are met.
- Action 6** Enforce the State of California Uniform Building Code that specifies that the indoor noise levels for residential living spaces not exceed 45 dB LDN/CNEL due to the combined effect of all noise sources. The State requires implementation of this standard when the outdoor noise levels exceed 60 dB LDN/CNEL. The Noise Referral Zones (60 CNEL) can be used to determine when this standard needs to be addressed. The Uniform Building Code (specifically, the California Administrative Code, Title 24, Part 6, Division T25, Chapter 1, Subchapter 1, Article 4, Sections T25-28) requires that "*Interior community noise levels (CNEL/LDN) with windows closed, attributable to exterior sources shall not exceed an annual CNEL or LDN of 45 dB in any habitable room.*" The code requires that this standard be applied to all new hotels, motels, apartment houses and dwellings other than detached single-family dwellings. The City can and is encouraged to reduce the noise standard from 45 CNEL to 40 CNEL. Additionally, the standard should be applied to single family homes.

Issue 3 - Community Noise Control for Non-Transportation Noise Sources. The focus of control of noise from non-transportation sources is the Community Noise Ordinance. The ordinance can be used to protect people from noise generated on adjacent properties.

- Action 7** Amend and adopt a new comprehensive community noise ordinance to ensure that City residents are not exposed to excessive noise levels from existing and new stationary noise sources. A proposed Noise Ordinance is contained in Appendix B. The purpose of the ordinance is to protect people

from non-transportation related noise sources such as music, machinery and pumps, air conditioners and truck traffic on private property. The Noise Ordinance does not apply to motor vehicle noise on public streets, but it does apply to vehicles on private property. The Noise Ordinance is designed to protect quiet residential areas from stationary noise sources. The noise levels encouraged by the ordinance are typical of a quiet residential area.

- Action 8* Enforce the new community Noise Ordinance. The most effective method to control community noise impacts from non-transportation noise sources is through application of the community noise ordinance.
- Action 9* Require that new commercial projects, proposed for development near existing residential land use, demonstrate compliance with the City Noise Ordinance prior to approval of the project.
- Action 10* All new residential projects to be constructed near existing sources of non-transportation noise (including but not limited to commercial facilities, public parks with sports activities) must demonstrate via an acoustical study conducted by a Registered Engineer that the indoor noise levels will be consistent with the limits contained in the noise ordinance.
- Action 11* Require construction activity to comply with limits established in the City Noise Ordinance.
- Action 12* Designate one agency in the City to act as the noise control coordinator. This will ensure the continued operation of noise enforcement efforts of the City.

Technical Appendices

Appendix A - Noise Measurement Results

Appendix B - Glossary

Exhibit A (Part 1)
Noise Measurement Results

SITE: # 1
LOCATION: I-101 near Dutcher Street Cross-section

DATE: September 27, 1990
TIME: 1:06 p.m.

MEASURED VALUES (dBA)

LEQ	L _{max}	L _{min}	L ₁	L ₁₀	L ₅₀	L ₉₀	L ₉₉
74.3	86.5	48.2	83.9	77.9	69.4	57.4	49.9

PRIMARY NOISE SOURCES:
Traffic, Lumber Yard Noise

LAND USE:
Open-space

COMMENTS:
L_{max} represents car horn

SITE: # 2
LOCATION: Cloverdale Blvd. and Hot Springs Road

DATE: September 27, 1990
TIME: 1:57 p.m.

MEASURED VALUES (dBA)

LEQ	L _{max}	L _{min}	L ₁	L ₁₀	L ₅₀	L ₉₀	L ₉₉
74.8	88.6	56.8	83.9	77.9	71.9	64.4	58.4

PRIMARY NOISE SOURCES:
Traffic

LAND USE:
Residential

COMMENTS:
L_{max} due to truck traffic

SITE: # 3
LOCATION: 70' from Cloverdale Blvd. centerline

DATE: September 27, 1990
TIME: 2:27 p.m.

MEASURED VALUES (dBA)

LEQ	L _{max}	L _{min}	L ₁	L ₁₀	L ₅₀	L ₉₀	L ₉₉
62.4	70.8	50.4	69.9	66.4	59.9	54.9	51.4

PRIMARY NOISE SOURCES:
Traffic, Gardener, School bell

LAND USE:
School, Residential

COMMENTS:
Truck traffic

SITE: # 4
LOCATION: 30' from Cloverdale centerline
DATE: September 27, 1990
TIME: 3:30

MEASURED VALUES (dBA)

LEQ	L _{max}	L _{min}	L ₁	L ₁₀	L ₅₀	L ₉₀	L ₉₉
74.8	87.7	46.9	84.4	78.9	71.4	54.9	48.4

PRIMARY NOISE SOURCES:
Traffic

LAND USE:
Residential (apartments)

COMMENTS:
Car horn and truck traffic

Exhibit A (Part 2)
Noise Measurement Results

SITE: # 5

LOCATION: *Lumberyard (near Cloverdale Blvd. N. of I-128)*

DATE: *September 27, 1990*

TIME: *4:27 p.m.*

MEASURED VALUES (dBA)

LEQ	Lmax	Lmin	L1	L10	L50	L90	L99
61.0	73.0	55.4	70.4	62.9	59.4	56.9	56.4

PRIMARY NOISE SOURCES:

Lumberyard operations, Tractors, Cars, Trucks

LAND USE:

Lumberyard, Low Density Residential

COMMENTS:

Lmax due to cars and trucks

SITE: # 6

LOCATION: *Corner of 1st and East Street*

DATE: *September 27, 1990*

TIME: *4:49 p.m.*

MEASURED VALUES (dBA)

LEQ	Lmax	Lmin	L1	L10	L50	L90	L99
60.8	75.3	45.4	71.4	64.4	56.4	48.9	46.4

PRIMARY NOISE SOURCES:

Traffic

LAND USE:

Residential

COMMENTS:

Lmax due to trucks

SITE: # 7

LOCATION: *60' From Train Tracks Near South Street*

DATE: *September 28, 1990*

TIME: *10:18 a.m.*

MEASURED VALUES (dBA)

LEQ	Lmax	Lmin	L1	L10	L50	L90	L99
44.1	53.8	39.5	50.4	45.9	43.4	41.4	40.4

PRIMARY NOISE SOURCES:

Temporary Construction, Tractors, Birds, Lumberyard

LAND USE:

Residential

COMMENTS:

Lmax due to construction and tractors

SITE: # 8

LOCATION: *1000' from south side of airport*

DATE: *September 28, 1990*

TIME: *12:45 a.m.*

MEASURED VALUES (dBA)

LEQ	Lmax	Lmin	L1	L10	L50	L90	L99
50.0	61.7	-	56.4	53.4	48.9	43.4	41.9

PRIMARY NOISE SOURCES:

Lumberyard, aircraft propeller

LAND USE:

Scattered Residences

COMMENTS:

Lmax due to Lumberyard

Noise Measurement Results

SITE: # 9

LOCATION: 100' from south end of runway

DATE: September 28, 1987

TIME: 1:10 p.m.

MEASURED VALUES (dBA)

LEQ	Lmax	Lmin	L1	L10	L50	L90	L99
61.9	80.7	34.6	76.9	55.4	38.9	35.9	34.9

PRIMARY NOISE SOURCES:

Lumberyard, Aircraft Propeller

LAND USE:

Scattered Residences

COMMENTS:

Aircraft fly-over

APPENDIX B - GLOSSARY

A-WEIGHTED SOUND LEVEL. The sound pressure level in decibels as measured on a sound level meter using the A-Weighted filter network. The A-Weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgement of loudness.

AMBIENT NOISE LEVEL. The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). The average equivalent A-Weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of ten (10) decibels to sound levels in the night before 7 a.m. and after 10 p.m.

DAY-NIGHT AVERAGE LEVEL (LDN). The average equivalent A-Weighted sound level during a 24-hour day, obtained after addition of ten (10) decibels to sound levels in the night before 7 a.m. and after 10 p.m.

DECIBEL (dB). A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A). A-weighted sound level (see definition above)

EQUIVALENT SOUND LEVEL (LEQ). The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.

FREQUENCY. The number of times per second that a sound pressure signal oscillates about the prevailing atmosphere pressure. The unit of frequency is the hertz. The abbreviation is Hz.

INTRUSIVE NOISE. That noise which intrudes over and above the ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, and tonal or informational content as well as the prevailing ambient noise level.

L10. The A-Weighted sound level exceeded 10 percent of the sample time. Similarly L50, L90, L99, etc.

NOISE. Any unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound..."



NOISE ATTENUATION. The ability of a material, substance, or medium to reduce the noise level from one place to another or between one room and another. Noise attenuation is specified in decibels.

NOISE EXPOSURE CONTOURS. Lines drawn around a noise source indicating constant or equal level of noise exposure. CNEL and LDN are typical metrics used.

NOISE REFERRAL ZONES. Such zones are defined as the area within the contour defining a CNEL level of 55 decibels. It is the level at which either State or Federal laws and standards related to land use become important and, in some cases, preempted local laws and regulations. Any proposed noise sensitive development which may be impacted by a total noise environment of 55 dB CNEL or more should be evaluated on a project specific basis.

NOISE SENSITIVE LAND USE. Those specific land uses which have associated indoor and/or outdoor human activities that may be subject to stress and/or significant interference from noise produced by community sound sources. Such human activity typically occurs daily for continuous periods of 24 hours or is of such a nature that noise is significantly disruptive to activities that occur for short periods. Specifically, noise sensitive land uses include: residences of all types, hospitals, places of worship and schools.

SOUND LEVEL (NOISE LEVEL). The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

SOUND LEVEL METER. An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

